

EXHIBIT 115

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

ANDREW CORZO, SIA HENRY, ALEXANDER LEO-
GUERRA, MICHAEL MAERLENDER, BRANDON
PIYEVSKY, BENJAMIN SHUMATE, BRITTANY
TATIANA WEAVER, and CAMERON WILLIAMS,
individually and on behalf of all others similarly situated,

Plaintiffs,

v.

BROWN UNIVERSITY, CALIFORNIA INSTITUTE
OF TECHNOLOGY, UNIVERSITY OF CHICAGO,
THE TRUSTEES OF COLUMBIA UNIVERSITY IN
THE CITY OF NEW YORK, CORNELL
UNIVERSITY, TRUSTEES OF DARTMOUTH
COLLEGE, DUKE UNIVERSITY, EMORY
UNIVERSITY, GEORGETOWN UNIVERSITY, THE
JOHNS HOPKINS UNIVERSITY, MASSACHUSETTS
INSTITUTE OF TECHNOLOGY, NORTHWESTERN
UNIVERSITY, UNIVERSITY OF NOTRE DAME DU
LAC, THE TRUSTEES OF THE UNIVERSITY OF
PENNSYLVANIA, WILLIAM MARSH RICE
UNIVERSITY, VANDERBILT UNIVERSITY, and
YALE UNIVERSITY,

Defendants.

Case No. 1:22-cv-00125

Hon. Matthew F. Kennelly

**EXPERT REPORT OF BRIDGET TERRY LONG, PH.D.
AUGUST 7, 2024**

TABLE OF CONTENTS

I. Introduction.....1

 A. Qualifications.....1

 B. Case Background6

 C. Assignment9

 D. Summary of Opinions.....11

II. Each Defendant’s Financial Aid Policies Are a Product of Its Mission to Advance Equity in and Access to Higher Education.....18

 A. Defendants and Their Peers Support Their Missions by Investing in a Wide Range of Educational Programming and Subsidizing the Cost of Higher Education19

 B. Defendants and Their Peers Focus on the Size and Composition of the Student Body in Furtherance of Their Educational Missions.....40

 C. Defendants and Their Peers Aim to Increase Access to Education through a Variety of Initiatives, Including Need-Based Financial Aid47

 D. Defendants Are Very Different from For-Profit Businesses77

III. The 568 Group Was Formed to Improve Equity and Transparency in Need Analysis86

 A. Need Analysis Systems Are Designed to Equitably Distribute Finite Need-Based Financial Aid Across Families with Varied Economic Circumstances87

 B. There Is a Long History of Efforts by the Higher Education Industry to Develop Better Approaches to Need Analysis.....95

 C. The 568 Group Provided a Valuable Forum for Schools to Discuss and Improve Equity and Transparency in Need Analysis100

 D. The 568 Group Developed Recommended Best Practices for Need Analysis that Benefited Students105

IV. Each Defendant Separately Determined EFCs and Institutional Grant Aid for Its Own Students, Reflecting Its Own Need Analysis Methodology, Application of Professional Judgment, and Packaging Policy116

 A. The CM Guidelines Did Not Limit Each Defendant’s Ability to Separately Determine Its Own EFC Estimates118

 B. Defendants’ Need Analysis Methodologies Routinely Diverged from the Recommended Approaches in the CM Guidelines.....123

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

C.	Defendants' Need Analysis Methodologies Deviated from the CM Guidelines' Recommended Treatment in a Variety of Ways, Including Choices that Further Decrease EFC	131
D.	Defendants Varied in Their Application of Professional Judgment and Did Not Consistently Rely on the 568 Group's PJ Guidelines.....	138
E.	Defendants' Individualized Need Analysis Methodologies Did Not Systematically Suppress Need-Based Institutional Grant Aid.....	142
V.	The Remaining Components of Dr. Singer's Challenged Conduct Are Widely Accepted Practices Exercised Broadly in the Higher Education Industry	149
A.	The Six "Core Principles" of Awarding Financial Aid	150
B.	The Primacy of Need-Based Aid	158
C.	Use of the IM as the Starting Point for Institutional Need Analysis	161
D.	Use of Professional Judgment in Exceptional Circumstances	165
E.	Information Sharing.....	168
VI.	Competitive Dynamics in the Higher Education Industry Leads Defendants to Compete with Schools Outside of Dr. Singer's Proposed Relevant Market	174
A.	Rankings Do Not Reflect a Full Picture of the Set of Competitors for Any Given School.....	174
B.	Students Apply to and Choose Among Higher Education Institutions Based on a Variety of Individualized Factors.....	181
C.	Named Plaintiffs' Decisions Illustrate How Students Consider Multiple Factors When Selecting a School.....	192
D.	Dr. Singer's Reliance on a Rankings Cutoff from USN&WR Does Not Reflect Industry or Academic Consensus	199
VII.	The Purpose of Managing Endowments is to Maintain Stable Funding to Support Schools' Missions Over the Long Term	202
A.	Endowments Are Complex Financial Portfolios Often Subject to Specific Rules and Restrictions	203
B.	Plaintiffs' Concept of "Excess Returns" on Endowments Cannot Be Relied Upon for Institutional Expenditure Decisions.....	212

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

I. INTRODUCTION

A. Qualifications

1. My name is Bridget Terry Long, Ph.D. I am the Saris Professor of Education and Economics at the Harvard Graduate School of Education (“HGSE”) and a Harvard University Distinguished Service Professor. I received my Ph.D. and M.A. in Economics from Harvard University and my A.B. in Economics from Princeton University with a Certificate in Afro-American Studies. My research has focused on policies and programs that aim to increase higher education access, affordability, and completion. I have provided evidence on the effectiveness of federal and state financial aid policies, academic supports such as postsecondary developmental and remedial education, and programs focused on increasing student persistence and educational attainment. I have also developed and tested interventions that aim to inform students about the availability of financial aid and help families complete financial aid forms and utilize college savings accounts. Several of my studies focus on college tuition pricing and finances, including both trends in revenue sources and expenditures. In total, I am the author or co-author of over 40 journal publications and 25 reports that address a range of topics related to higher education.
2. I am a Research Associate of the National Bureau of Economic Research (“NBER”) and an Affiliate of the Abdul Latif Jameel Poverty Action Lab (“J-PAL”). I serve as Chair of the Board of the Manpower Demonstration Research Corporation (“MDRC”), a nonprofit social policy research organization, and as a Trustee of the Axim Collaborative, a social enterprise dedicated to expanding educational access and improving learning. I also serve as a member of the Red Sox Foundation Board. Due to my expertise, I have testified numerous times before U.S. Congressional committees on education issues, including

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

approaches to ensuring access to higher education for low-income students and the use of tax credits for college expenses, and I served as an expert witness in the *Students for Fair Admissions Inc. v. The University of North Carolina at Chapel Hill* matter, on behalf of UNC Chapel Hill.

3. I have served in numerous advisory roles for governments and organizations focused on higher education. During the Obama administration, I served as Chair of National Board for Education Sciences (“NBES”), the advisory panel appointed by the President to advise the Director and Commissioners of the Institute of Education Sciences (“IES”) at the U.S. Department of Education. I was also appointed to serve on the Public Education Nominating Council for Massachusetts by Governor Deval Patrick from 2007 to 2015, which shepherded the process of identifying and nominating board members for the public universities and colleges. I was a member of the Policy Research Panel for the Advisory Committee on Student Financial Assistance (a Federal advisory committee chartered by Congress that provides advice of student financial aid policy to the Secretary of the U.S. Department of Education) from 2009 to 2012. Additionally, I was an outside advisor on the College Board’s “Rethinking Financial Aid” Task Force from 2006 to 2012.
4. My scholarship, leadership, and impact have been recognized by leaders in the field with my elections to the American Academy of Arts and Sciences, the National Academy of Education, and the International Academy of Education. I have been awarded the Peter H. Rossi Award for contributions to the Theory or Practice of Program Evaluation from the Association for Public Policy Analysis and Management (“APPAM”) and the Spencer Foundation Mentor Award. I have also won numerous competitive research grants,

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

including major awards from the U.S. Department of Education, National Science Foundation (“NSF”), and the Bill & Melinda Gates Foundation.

5. As Dean of HGSE from 2018 to 2024, I applied much of my scholarly expertise about higher education in my leadership role. I managed the school’s financial resources, faculty, and staff, and led our fundraising efforts. I also stewarded important initiatives such as the development and launch of our redesigned master’s in education degree program, the pivot to remote education during academic year 2020-2021, and the introduction of HGSE’s first online master’s degree. I expanded HGSE’s external engagement with working educators, school administrators, parents, and policymakers. I also dramatically increased HGSE’s financial aid for master’s students by raising nearly \$84 million in gifts over two years and leading our efforts to develop communication and outreach plans to increase applications and enrollment among low-income students.¹ I previously served as HGSE’s Academic Dean (2012 to 2017) and Faculty Director of the Research Doctoral Program (2010 to 2013).
6. As Dean, I also participated regularly in Harvard University leadership meetings, helped to influence university decision-making and policy, and worked closely with members of the senior leadership team, including the President, Provost, Executive Vice President, and Chief Financial Officer, as well as the Deans of other schools and members of the Harvard

¹ I use the term “low-income students” throughout this report to refer to students with limited income and assets as determined by higher education institutions when awarding financial aid. This is consistent with how I use the term “low-income students” in my academic research. Defendants use a wide range of terminology, including “low-income students,” to describe these students. *See, for example*, “First Generation & Low-Income Student Support,” Cornell University, available at <https://scl.cornell.edu/FGLI>, accessed July 8, 2024 (“Students with low-income status have little or no expected parent contribution as part of their financial aid package, are Pell Grant recipients, or have had their academic experience limited due to socioeconomic status.”); “About Penn First Plus,” University of Pennsylvania, available at <https://pennfirstplus.upenn.edu/about-penn-first-plus/>, accessed July 8, 2024 (Penn notes the “subjectivity in this space” and that many terms, such as “lower-income,” “limited-income,” and “modestly resourced” are used.).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Corporation. As part of my other University service, I was a member of the Harvard University Task Force on the Future of Teaching and Learning, the HarvardX Research Committee, and the Committee to Establish Metrics for the Cost of Higher Education. Throughout my time as a faculty member at Harvard, I have also worked closely with admissions professionals at Harvard College and advised Harvard leadership about admissions and financial aid issues. For example, I advised Lawrence Summers during his time as President of Harvard on how the university might increase financial aid for low-income students and simplify communication to those families for greater impact. More recently, I have been working with the Harvard College Admissions Office as they consider ways they might improve their outreach efforts and admissions policies to increase access for low-income students.

7. I have over 25 years of experience teaching graduate students and higher education professionals in academic programs and professional education workshops. My courses have focused on the economics of higher education including finances, policies, and trends, college decision-making, postsecondary student access and outcomes, and higher education leadership. As a faculty instructor, I have trained hundreds of students who work in higher education administration, including a large number of admissions and financial aid professionals. My former students have gone on to be directors of admissions and taken on senior enrollment management roles at colleges and universities such as Brown, Princeton, Caltech, and the University of Pennsylvania ("Penn"). Additionally, my former students have gone on to lead projects at organizations such as the College Board and Consortium on Financing Higher Education ("COFHE"), are leading scholars at top universities, and hold leadership positions at prominent universities.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

8. I have also taught hundreds of working professionals for over 20 years in Harvard University's professional development offerings, including provosts, deans, directors of admissions, and others working in enrollment management. In addition to formal courses, I have given lectures to participants in the Harvard Administrative Fellows Program, the National Conference of State Legislators, the Postsecondary National Policy Institute, and attendees of the COFHE Financial Aid Officer Retreat.
9. I have also actively engaged with professionals in the higher education industry to share my expertise and be a part of larger discussions about government and institutional financial aid policies. For example, I have presented at the National Association of Student Financial Aid Administrators ("NASFAA"), and, in 2008, the organization awarded me the Robert P. Huff Golden Quill Award, which recognizes excellence in research and published works on student financial assistance. I regularly participate in conversations with admissions professionals through various channels. I have also advised organizations and schools, such as Tufts University, as they explored the feasibility of implementing a need-blind admissions policy and a full-need financial aid policy. I served as Trustee of Newbury College from 2004 to 2009 and have also worked with the leadership at Roxbury Community College and Bunker Hill Community College.
10. A copy of my curriculum vitae, which provides additional detail on my education, qualifications, and professional affiliations, as well as a list of my publications from the past ten years and the cases in which I have provided expert testimony in the last four years, is attached hereto as **Appendix A**.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

B. Case Background

1. Parties Involved

11. Defendants in this matter are private, non-profit higher education institutions² and include Brown, Caltech, Chicago, Columbia, Cornell, Dartmouth, Duke, Emory, Johns Hopkins, Georgetown, MIT, Northwestern, Notre Dame, Penn, Rice, Vanderbilt, and Yale (collectively, “Defendants”).³ [REDACTED]

12. Defendants were members of the 568 Presidents Group (“568 Group”), named for Section 568 of the Improving America’s Schools Act of 1994 (“Section 568”), along with several other need-blind private universities and liberal arts colleges.⁴ Section 568 provided higher education institutions that admit students on a need-blind basis with an exemption from the antitrust laws authorizing them to: (1) agree “to award financial aid only on the basis of demonstrated financial need”; (2) use “common principles of analysis for determining financial need”; (3) use “a common aid application form”; and (4) exchange, “through an independent third party, financial information submitted by students and their families.”⁵

² Throughout this report, I use the terms “schools” and “higher education institutions” interchangeably.

³ Second Amended and Supplemental Class Action Complaint, *Henry, et al. v Brown University*, 1:22-cv-00125 February 6, 2023 (“Complaint”), p. 1.

⁴ “A Brief Summary and Analysis of Section 568,” 568 Presidents Group, January 24, 2022, available at <https://web.archive.org/web/20220124040057/http://www.568group.org/home/?q=node/12>, accessed August 25, 2023. As of January 2022, non-Defendant 568 Group members included Amherst College, Boston College, Claremont McKenna College, Davidson College, Grinnell College, Middlebury College, Pomona College, Swarthmore College, and Williams College. “568 Presidents Group Member Institutions,” January 24, 2022, available at <https://web.archive.org/web/20220124040052/http://www.568group.org/home/?q=node/24>, accessed July 6, 2024.

⁵ Need-Based Educational Aid Act of 2015, H. R. Rep. No. 114-224, pp. 2-3.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Section 568 was extended in 1997, 2001, 2008, and 2015.⁶ The fourth component of Section 568 that allowed for the exchange financial information through a third party was not extended in 2015 due to a “recogni[tion] that schools have not utilized [this] component.”⁷ Section 568 expired on September 30, 2022, and the 568 Group dissolved effective November 4, 2022.⁸

13. Plaintiffs define the relevant Class Period as:⁹

- Fall term 2003 through June 30, 2023 for Columbia, Cornell, Duke, Georgetown, MIT, Northwestern, Notre Dame, and Rice;
- Fall term 2003 through June 30, 2007 and fall term 2018 through June 30, 2023 for Yale;
- Fall term 2003 through June 30, 2014 for Chicago;
- Fall term 2003 through June 30, 2019 for Penn;
- Fall term 2003 through June 30, 2020 for Vanderbilt;
- Fall term 2004 through June 30, 2023 for Brown, Dartmouth, and Emory;
- Fall term 2020 through June 30, 2023 for Caltech; and,
- Fall term 2022 through June 30, 2023 for Johns Hopkins.

14. There are eight Named Plaintiffs in this matter: Andrew Corzo, who attended Chicago, Sia Henry and Alexander Leo-Guerra, each of whom attended Duke, Brandon Piyevesky, who attended Northwestern, Benjamin Shumate, who attended Brown, and Michael

⁶ Need-Based Educational Aid Act of 2015, H. R. Rep. No. 114-224, pp. 2-3.

⁷ Need-Based Educational Aid Act of 2015, H. R. Rep. No. 114-224, pp. 2-3.

⁸ Complaint, ¶ 122.

⁹ Expert Report of Hal J. Singer, Ph.D. (Errata II Updated), *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 June 10, 2024 (“Singer Report”), ¶ 9. I understand that there is a dispute as to when individual Defendants entered or exited the 568 Group. In this report, I use the Class Period as presented by Dr. Singer, but I am not opining on the correct conduct dates. To the extent that the Class Period is updated, I may be asked to update my analyses.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Maerlender, Brittany Tatiana Weaver, and Cameron Williams, each of whom attended Vanderbilt.¹⁰ Named Plaintiffs each received financial aid from their respective universities that did not cover the full cost of attendance (“COA”), which includes tuition and fees, room and board, and other estimated expenses associated with attending the school.¹¹

15. Named Plaintiffs seek to represent a proposed class of U.S. citizens and permanent residents “who have during the Class Period (a) enrolled in one or more of Defendants’ full-time undergraduate programs, (b) received at least some need-based financial aid from one or more Defendants, and (c) whose tuition, fees, room, or board to attend one or more of Defendants’ full-time undergraduate programs was not fully covered by the combination of any types of grant or merit aid in any undergraduate year.”¹²

2. Plaintiffs’ Allegations

16. Plaintiffs allege that “Defendants entered into a conspiracy [...] by joining or associating with the 568 Group with the goal of suppressing [need-based] institutional grant aid and artificially inflating the difference between (a) the cost of attendance (the sum of tuition, fees, room and board paid by students to attend an institution) and (b) the [need-based] institutional grant aid provided.”¹³
17. Plaintiffs further allege a so-called conspiracy (“Challenged Conduct”) that “included an agreement among Defendants to apply a ‘consensus approach’ to financial aid which involved reaching agreement on (1) six core principles of awarding financial aid [...]; (2)

¹⁰ Complaint, ¶¶ 16-24

¹¹ Complaint, ¶¶ 16-24.

¹² Singer Report, ¶ 8 (quoting Complaint, ¶ 200).

¹³ Singer Report, ¶ 3.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

making need-based aid the primary form of financial aid; (3) using the Institutional Methodology [...] as the 'base' method for need analysis and as the starting point for calculating financial aid; (4) developing and implementing the Consensus Methodology [...] as a variation of the IM for purposes of need analysis; (5) using a common manual for applying 'professional judgment' to determinations of need, and treating professional judgment as the exception, rather than the rule; and (6) reciprocally sharing competitively sensitive information relating to principles, practices, amounts, and methods regarding the provision of financial aid."¹⁴

C. Assignment

18. Counsel for Defendants have asked me to review and respond to the opinions offered by the experts who intend to testify on behalf of Plaintiffs related to Defendants' practices, the higher education industry, and the alleged Challenged Conduct. Plaintiffs submitted reports in this matter from Dr. George Bulman,¹⁵ Ms. Elizabeth Mora,¹⁶ and Dr. Hal Singer.¹⁷ I have been asked to address the following opinions offered by Plaintiffs' experts:

- First, Ms. Mora claims that "Defendants are complex organizations that, in many material respects, operate like for-profit businesses using sophisticated investment strategies."¹⁸
- Second, Dr. Singer claims that "record evidence, common to the Class as a whole, indicates that the Challenged Conduct generated anticompetitive effects, increasing Effective Institutional Prices relative to what they would

¹⁴ Singer Report, ¶ 4.

¹⁵ Expert Report of George Bulman, Ph.D., *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 May 14, 2024 ("Bulman Report").

¹⁶ Expert Report of Elizabeth Mora, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 May 14, 2024 ("Mora Report").

¹⁷ Singer Report.

¹⁸ Mora Report, ¶ 5.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

have been absent the Challenged Conduct.”¹⁹ Dr. Singer defines the “Challenged Conduct” as consisting of “an agreement among Defendants to apply a ‘consensus approach’ to financial aid, which involved developing and implementing the [CM] as a variation of the IM for purposes of need analysis” as well as five other allegedly agreed on practices, all of which Dr. Singer argues was in service of the “goal of suppressing [need-based] institutional grant aid.”²⁰

- Third, Dr. Singer claims that “[t]he relevant market consists of undergraduate Elite Private Universities whose undergraduate programs consistently ranked in the [U.S. News and World Report] Top 25 during the Class Period.”²¹ Dr. Singer claims that he uses “[c]ommon evidence and methods” in his analysis.²² Dr. Singer excludes all liberal arts colleges and all public universities, including flagship public universities, from his proposed relevant market.²³
- Finally, Dr. Bulman claims that “[a]ll Defendants could have substantially increased their institutional aid during the Class Period while increasing the purchasing power of their endowments.”²⁴ Ms. Mora likewise claims that “Defendants have substantial flexibility in managing and spending their annual revenues and endowment earnings on operations and programs, including institutional financial aid.”²⁵ Dr. Singer claims that “[o]ther things being equal, the higher the three-year moving average excess return in any year, the more resources the Defendants would have to devote to need-based institutional grant aid.”²⁶

19. Part of the work conducted in connection with this assignment was performed under my direction by others at Analysis Group, Inc., an economics research and consulting firm. I am being compensated at a rate of \$950 per hour for my time on this matter. I also receive

¹⁹ Singer Report, ¶ 13.3.

²⁰ Singer Report, ¶¶ 3-4.

²¹ Singer Report, ¶ 72.

²² Singer Report, ¶ 13.1.

²³ Singer Report, ¶¶ 73, 114.

²⁴ Bulman Report, ¶ 9(c).

²⁵ Mora Report, ¶ 5(b).

²⁶ Singer Report, ¶ 241.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

compensation based on fees charged by Analysis Group. No compensation is contingent on the nature of my findings, the testimony I give, or the outcome of this litigation.

20. A complete list of materials I relied on in connection with this report is included as **Appendix B**. My report is based on information available to me as of the date of this report. I reserve the right to update and revise my report in the event that new information relevant to my opinions is produced. My understanding is that the opinions offered in this report may have additional legal significance and by describing my assignment here, I do not intend to limit the use of my opinions in this case.

D. Summary of Opinions

21. Based on my expertise and analysis, I have reached the following opinions with regard to the issues addressed and opinions expressed by Ms. Mora, Dr. Singer, and Dr. Bulman.
22. Each Defendant is a mission-driven higher education institution that seeks to achieve educational excellence and social betterment, especially through the students who attend their schools. Defendants pursue this mission through their dedication to providing a rigorous and engaging education to qualified students no matter their background and irrespective of their ability to afford college. Consequently, Defendants and their peers invest immense resources to provide students with a rich set of educational experiences, prioritize creating a student body that is diverse along many dimensions, and subsidize all students' higher education costs, often at the expense of generating higher revenues. Plaintiffs' experts fail to consider the many ways in which Defendants' actions and policies, including their financial aid policies and practices, serve their missions. Contrary to Ms. Mora's claims, Defendants are not revenue-maximizing like for-profit businesses;

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

and contrary to Dr. Singer's claims, it is flawed to think that absent the Challenged Conduct, Defendants would have adopted financial aid philosophies, principles, or policies that were inconsistent with their broader missions.

- Each Defendant, similar to peer schools, devotes substantial financial resources to providing a high-quality educational experience for its students. These investments are costly. In fact, each Defendant's educational expenditures per student exceed the published undergraduate tuition, fees, and room and board charges, meaning that each Defendant subsidizes all of their undergraduate students' educations even if they do not receive financial aid. Further, Defendants and their peers provide additional financial support to their students in the form of institutional grant aid, substantially reducing the revenue they collect from students. In the 2021-2022 academic year alone, Defendants provided \$832 million in institutional grant aid. *See Section II.A.*
- Although Defendants and their peers could increase their revenues by enrolling only qualified students who can afford to pay the full cost of attending their school, each Defendant instead selects qualified students across a wide range of backgrounds, talents, and interests to create a high-achieving, well-balanced freshman class each year. Defendants compose their student bodies this way because their public service missions motivate them to advance equitable access to education and social mobility. Defendants' efforts to enroll a wide range of student profiles also have beneficial educational effects, as academic research has demonstrated that a student body composed of a variety of backgrounds and experiences enhances the quality of education and improves students' educational outcomes. *See Section II.B.*
- As part of Defendants' individual missions to increase access and social mobility, each Defendant has developed and maintains a variety of initiatives and policies designed to work together to identify, attract, admit, matriculate, and graduate outstanding students from disadvantaged backgrounds. These initiatives and policies include efforts such as targeted recruiting and outreach programs, need-blind admissions policies, and the provision of need-based financial aid. Many of these policies reduce the potential revenues Defendants can receive from students while increasing their outlay of expenditures per student. However, these initiatives and policies are essential to each school's mission. *See Section II.C.*

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Each Defendant has implemented initiatives and policies to support their goals of increasing access for students, many of which are fundamental financial aid and admissions policies and practices. These investments are costly and are often at the expense of the potential for greater tuition revenue from higher-income students. These investments show that Defendants are dedicated to their missions and undermine the plausibility of any notion that Defendants would have approached these policies and practices differently absent their participating in the 568 Group. They also highlight how Defendants differ starkly from for-profit businesses. Ms. Mora's attempt to equate Defendants to for-profit businesses ignores the specific missions of each Defendant and the central role these missions play in institutional decision-making, which leads to inappropriate comparisons and thoroughly flawed opinions. *See Section II.D.*

23. Need-based financial aid is an important tool for increasing low- and middle-income students' access to higher education, consistent with the goals of educational equity, access, and excellence. Each Defendant uses need analysis to equitably distribute need-based financial aid to admitted students who do not otherwise have the means to attend. Due to the inherent complexity of need analysis, it is common for schools, the government, and other organizations to engage in discussions and debates focused on how to improve equity and transparency in the need analysis process. These discussions can be critical to ensuring the most aid is provided to the neediest students and that students with similar financial challenges are awarded similar amounts. The 568 Group was one such forum for developing economic expertise to improve need analysis.

- It is and has historically been widely accepted in the higher education industry that any need analysis methodology applied by a school should seek to advance the principles of vertical equity, which is to treat families in different financial circumstances differently, and horizontal equity, which is to treat families in similar financial circumstances similarly. While these principles are clear, there are not always clear answers to questions of how to accomplish these goals, given the myriad types of income, investments, assets, and expenses and the importance of a

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

student's family and local context. Application of these principles is often harder and more nuanced in practice than in theory. *See Section III.A.*

- Since the 1950s, schools, the federal government, and nonprofit organizations have sought to improve need analysis methodologies to help students by better accounting for their financial challenges, reducing confusion about the process, and easing the burden of multiple application forms. After the introduction of the Federal Methodology ("FM") and the Institutional Methodology ("IM") in the early 1990s, there were increased discussions in the financial aid community on circumstances and questions that remained unaddressed and what the best practices might be for schools. Different need analysis methodologies could lead the same student to receive very different estimates of their family's ability to pay for college, which threatened to undermine students' confidence that their levels of need were being assessed fairly and accurately by each school. Defendants and other schools who were focused on increasing access sought to bring together their economic expertise, analyses, and experiences and created the 568 Group to dedicate attention to improving understanding of best practices and options in order to bolster equity in need analysis. *See Sections III.B-C.*
- The 568 Group's discussions led to the development of the Consensus Methodology Guidelines ("CM Guidelines") and an accompanying document with guidance on the application of professional judgment, adapted from existing industry guidance ("PJ Guidelines"). The CM Guidelines expanded on existing guidance, particularly from the College Board, in relation to the IM. The 568 Group anticipated that the modifications in the CM Guidelines would in aggregate decrease students' expected family contributions ("EFCs") and therefore benefit students. For example, the CM Guidelines' recommendation to adjust for the cost of living resulted in decreasing EFCs for students living in high-cost areas. *See Section III.D.*

24. Although the 568 Group developed the CM Guidelines, each Defendant separately determined its own specific need analysis methodology, which often reflected different choices about how to approach elements of need analysis that either differed from or were not covered by the recommendations in the CM Guidelines. These individualized

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

approaches are inconsistent with what Dr. Singer portrays as a coordinated effort to suppress need-based institutional grant aid.

- The CM Guidelines did not provide a specific formula to determine EFCs for individual admitted students. In fact, the CM Guidelines discussed only 17 of the dozens of elements of need analysis, and even their discussion of these 17 elements was often vague and incomplete, leaving each school to make a series of decisions regarding its own need analysis methodology. *See Section IV.A.*
- Dr. Singer attempts to characterize each Defendant's *entire* need analysis methodology as "following" the CM Guidelines based on nothing more than a collection of high-level statements. In my professional experience, a reliable understanding of a school's baseline need analysis methodology requires a systematic review of how, in practice, the school treated individual elements of need analysis. I have performed such a review on eight elements of need analysis for which the CM Guidelines provided actionable recommendations and found that, in fact, Defendants' treatment of these elements was often inconsistent with the recommendations in the CM Guidelines. *See Section IV.B.*
- Contrary to Dr. Singer's assertion that Defendants sought to establish a floor for EFCs, my analysis demonstrates that Defendants' individual need analysis methodologies were inconsistent with the CM Guidelines in numerous ways, including in ways that lowered EFCs relative to the CM Guidelines, which would benefit impacted students. *See Section IV.C.*
- Defendants also did not consistently rely on the 568 Group's PJ Guidelines in their need analyses. Importantly, the concept of professional judgment is, by definition, rooted in the application of a financial aid officer's independent, individual judgment to a particular student's unusual or extenuating circumstances to calculate an equitable EFC for that student. *See Section IV.D.*
- Whether the EFC a specific Defendant calculated for a particular student would have been higher or lower absent the 568 Group is a highly individualized question. Further, a hypothetical increase in an individual student's EFC would not necessarily have decreased the student's institutional grant aid as claimed by Dr. Singer. Institutional grant aid is determined not only by EFCs, but also by each individual Defendant's

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

packaging policies, including the composition of the package, which Dr. Singer concedes were not discussed by the 568 Group. In fact, each Defendant took steps during the Class Period to reduce their reliance on loans and *increase* the share of financial aid they provided in the form of institutional grant aid. *See Section IV.E.*

25. Dr. Singer classifies several fundamental principles and practices underlying the financial aid system as Challenged Conduct. These include long-standing and widely held principles based on the fundamental values of equity, efficiency, and transparency as well as commonplace practices such as using the IM as a starting point for need analysis, using professional judgment when reviewing individual students' need analysis, and sharing basic information about financial aid practices. Each of these principles and practices are shared by many non-Defendant organizations in the higher education industry. Dr. Singer has not demonstrated that Defendants' commitment to these principles and practices was influenced by their membership in the 568 Group, rather than simply reflecting Defendants' pre-existing approaches and widespread industry standards. *See Section V.*
26. Dr. Singer's flawed approach extends into his proposed definition of the relevant market as consisting of the top 25 private national universities ranked by U.S. News and World Report. This definition is not an accurate reflection of how students, including Named Plaintiffs, select schools for application and matriculation, and it fails to capture important competitive dynamics in the higher education industry.
 - Individual student preferences lead students to consider public universities, liberal arts colleges, and lower-ranked private national universities alongside the schools in Dr. Singer's proposed relevant market. Those individual preferences translate to different sets of potential schools for each student to consider, depending on the value they personally place on different attributes. In turn, this results in each school having large and varying competitive sets, especially when examining their competitors from the student perspective. This range of different competitive sets for

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Defendants includes a number of schools outside of Dr. Singer's proposed relevant market. *See Sections VI.A-C.*

- The academic literature studying higher education, including my own work, regularly includes schools outside of Dr. Singer's proposed relevant market in studies of student choice and higher education competition. For example, in my own work studying how tuition prices and financial aid policies affect student access and choice, I include both public universities and liberal arts colleges in my analysis. *See Section VI.D.*

27. The analyses by Dr. Bulman and Ms. Mora are also flawed with respect to their assessment of endowment and budget management. Endowments provide long-term financial stability to enable schools to make important commitments and investments, and such stability has enabled Defendants' educational expenditures per student to exceed the amount collected from tuition, fees, and room and board charges.

- Endowments are made up of many individual funds that are subject to complex rules and restrictions regarding how funds can be managed and how returns can be spent. Ms. Mora asserts, without support, that a "substantial portion" of distributions from restricted endowments are not "really" restricted, yet does not analyze the individual Defendants' particular circumstances. My direct and indirect experience with these rules and restrictions is that they are often very difficult to modify in practice, including because doing so might be in conflict with legal agreements that commit the school to follow the donors' wishes and because the continued stewardship of donors by demonstrating how their funds have been spent appropriately is an important activity for schools to continue to receive future gifts. In fact, in my experience it is rare for a higher education institution to attempt to alter endowment restrictions, particularly across major spending categories (e.g., from a faculty chair to financial aid). *See Sections VII.A.*
- Plaintiffs' experts' focus on so-called "excess returns" to suggest that Defendants could have spent more on financial aid but for the Challenged Conduct fails to contend with the realities of institutional financing. Institutional spending decisions are long-term commitments that are made in support of a school's long-term goals and mission. The assertions by Plaintiffs' experts are based on hindsight that administrators do not have

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

the benefit of. Administrators cannot assume that large past returns will be repeated in the future. Allocating extra money from the endowment to financial aid in a year of unusually strong market performance risks the inability to continue to fund financial aid at that new, higher level in future years, causing volatility and uncertainty in institutional financial aid upon which students rely. *See Section VII.B.*

II. EACH DEFENDANT'S FINANCIAL AID POLICIES ARE A PRODUCT OF ITS MISSION TO ADVANCE EQUITY IN AND ACCESS TO HIGHER EDUCATION

28. Dr. Singer claims that Defendants engaged in Challenged Conduct that was “inconsistent with unilateral conduct and unfettered competition,”²⁷ while Ms. Mora claims that Defendants “in many material respects, operate like for-profit businesses” and follow a strategy “analogous to a venture capital fund” and seek to maximize revenues or donations.²⁸ These claims erroneously equate Defendants, who are non-profit higher education institutions, with for-profit businesses. Dr. Singer’s claim further implies that, absent Defendants’ participation in the 568 Group, each Defendant would not have independently adopted many of the financial aid practices that they currently have. Dr. Singer’s and Ms. Mora’s opinions fail to consider Defendants’ financial aid philosophies and practices not only within the broader context of higher education funding, but also within the context of each Defendant’s mission. Defendants’ financial aid philosophies and practices work in concert with other activities, initiatives, and policies that support their broader mission of providing a rigorous and engaging education to qualified students no matter their background and irrespective of their ability to afford college.

²⁷ Singer Report, ¶ 123 (“I analyze record evidence concerning the extent to which the Challenged Conduct is consistent with the allegations of conspiracy and inconsistent with unilateral conduct and unfettered competition in setting Effective Institutional Prices.”).

²⁸ Mora Report, ¶ 73.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

29. In the following subsections, I discuss the educational and societal goals of many non-profit higher education institutions, including Defendants, which lead them to invest in providing a rich set of educational experiences and resources, to subsidize all students' higher education costs, and to prioritize diversity along many dimensions in the student body, often at the expense of generating higher revenues (**Sections II.A-B**). In **Section II.C**, I discuss some of the many initiatives and policies that Defendants and their peers²⁹ have individually implemented to support their goals of increasing access for students, many of which are fundamental financial aid and admissions policies and practices. Dr. Singer has not demonstrated that Defendants would have approached these fundamental policies and practices differently absent their participating in the 568 Group in light of their long-standing missions (which I discuss in the context of the Challenged Conduct in **Section V**). In **Section II.D**, I discuss Ms. Mora's failure to contend with key differences between Defendants, which are mission driven non-profit organizations, and actual for-profit businesses, including for-profit higher education institutions which do not prioritize educational or societal goals.³⁰

A. Defendants and Their Peers Support Their Missions by Investing in a Wide Range of Educational Programming and Subsidizing the Cost of Higher Education

30. Unlike for-profit businesses, each of the Defendants pursues a mission focused on serving its students and society through education, research, and public service. The academic

²⁹ Throughout this report, I refer to Defendants and their peer schools. My use of the term "peers" or "peer schools" does not reflect a specific list of peers of any given Defendant and does not reflect an opinion that every Defendant is a peer of another Defendant. Instead, my use of the term peer schools is intended to refer broadly to the 17 Defendants and the variety of schools that any of these Defendants may consider peers in a variety of contexts, as I discuss in **Section VI**.

³⁰ Mora Report, ¶ 5.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

literature has long recognized that “managers of colleges and universities are more idealistically motivated—they care about educational excellence, about student opportunity and access, about diversity.”³¹ Defendants document these missions publicly in their university mission statements. For example, Cornell’s mission is to “discover, preserve and disseminate knowledge, to educate the next generation of global citizens, and to promote a culture of broad inquiry,” and, as the land-grant university of New York State, “through public service, to enhance the lives and livelihoods of students, the people of New York and others around the world.”³² This mission is also emphasized in speeches and communications by university leadership at Cornell.³³

31. At the core of each Defendant’s mission is an acknowledgement of their role in the betterment of society, especially through the students who attend their schools. For example, in addition to the Cornell mission, which seeks to “educate the next generation of global citizens”,³⁴ Georgetown seeks to educate students “to be responsible and active participants in civic life and to live generously in service to others”;³⁵ MIT aims to focus on “scholarship that will best serve the nation and the world in the 21st century”,³⁶ Notre Dame “is dedicated to the pursuit and sharing of truth for its own sake,” and seeks to “create

³¹ Winston, Gordon, “Why Can’t a College Be More Like a Firm,” *Change: The Magazine of Higher Learning*, 1997, p. 34 (emphasis removed).

³² “University Mission,” Cornell University available at <https://www.cornell.edu/about/mission.cfm>, accessed July 8, 2024.

³³ “2022 State of the University Address by President Martha E. Pollack,” Cornell University, March 26, 2022, available at <https://president.cornell.edu/speeches-writings/2022-state-of-the-university-address/>, accessed July 23, 2024.

³⁴ “University Mission,” Cornell University available at <https://www.cornell.edu/about/mission.cfm>, accessed July 8, 2024.

³⁵ “University Mission Statement,” Georgetown University, available at <https://governance.georgetown.edu/mission-statement/>, accessed July 6, 2024.

³⁶ “Mission Statement,” Massachusetts Institute of Technology, available at <https://www.mit.edu/about/mission-statement/>, accessed July 6, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

a sense of human solidarity and concern for the common good that will bear fruit as learning becomes service to justice”;³⁷ and Penn aims to address “great challenges and opportunities[,]” while “cultivat[ing] leaders who serve.”³⁸

32. These missions guide how each Defendant recruits, educates, and supports students, while engaging with the greater community. As I describe in the following subsections, Defendants and their peers invest in a range of activities and educational programming to enhance students’ experiences both inside and outside of the classroom, while also setting tuition, fees, and room and board that do not fully cover the institutional expenditures each school incurs in educating its students and devoting substantial school resources to provide institutional grant aid to further lower the costs incurred by students to attend their schools. Unlike for-profit businesses, these investments and subsidies reduce rather than increase schools’ revenues and are pursued in place of activities that could increase revenues, such as admitting only students who do not need financial aid or focusing resources only on the most popular fields of study or areas of research that attract large research grants.

1. Defendants and Their Peers Devote Substantial Resources to Providing Students a High-Quality Educational Experience

33. To prepare their students “to be responsible and active participants in civic life” and “leaders who serve,” while also providing benefits to the broader community,³⁹ Defendants and their peers dedicate substantial financial resources to provide students with a deep and

³⁷ “Mission,” University of Notre Dame, available at <https://www.nd.edu/about/mission/>, accessed July 6, 2024.

³⁸ “Penn’s Focus on Tomorrow,” University of Pennsylvania, available at <https://in-principle-and-practice.upenn.edu/>, accessed July 6, 2024.

³⁹ “University Mission Statement,” Georgetown University, available at <https://governance.georgetown.edu/mission-statement/>, accessed July 6, 2024; “Penn’s Focus on Tomorrow,” University of Pennsylvania, available at <https://in-principle-and-practice.upenn.edu/>, accessed July 6, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

rigorous academic foundation and educational experience inside and outside of the classroom. These institutional expenditures reflect each school's mission and demonstrate behavior distinctive from for-profit businesses, which prioritize activities that could generate more revenue while reducing or eliminating activities that lose revenue and thus maximize profits.⁴⁰ Similar to their peer schools, Defendants invest in (1) a large number of wide-ranging academic programs, (2) highly qualified and accomplished faculty and their research, (3) residential facilities and staff, (4) student affairs staff and resources, (5) other educational facilities, and (6) community partnerships.

34. *A large number of wide-ranging academic programs.* Defendants and their peers offer courses ranging from religion, classical studies, music, and philosophy to molecular biology, mechanical engineering, and computer science. For example:

- Penn offers over 150 different majors and accompanying sub-specialties,⁴¹ and during the Fall 2022 semester alone, Penn offered a total of 1,746 undergraduate courses across various fields.⁴² This included 18 courses in Classical Studies,⁴³ to serve students interested in the area or those majoring in sub-specialties such as Classical Civilizations, Classical Languages and Literature, or Mediterranean Archaeology,⁴⁴ even though Penn only conferred nine bachelor's degrees related to these sub-specialties in 2022-2023.⁴⁵ Penn's decision to offer these sub-specialties despite limited student interest reflects the commitment that Defendants and their

⁴⁰ Brealey, Richard et al., *Principles of Corporate Finance*, 13 Ed., New York, New York, McGraw-Hill Education, 2020, pp. 7-10.

⁴¹ "Majors," University of Pennsylvania, available at <https://catalog.upenn.edu/undergraduate/arts-sciences/majors/>, accessed July 6, 2024.

⁴² "Search Classes 2024," University of Pennsylvania, 2024, available at <https://courses.upenn.edu/>, accessed August 2, 2024.

⁴³ "Fall 2022 Classical Studies," University of Pennsylvania, 2022, available at <https://courses.upenn.edu/>, accessed August 3, 2024.

⁴⁴ "Majors," University of Pennsylvania, available at <https://catalog.upenn.edu/undergraduate/arts-sciences/majors/>, accessed July 6, 2024.

⁴⁵ "University of Pennsylvania Programs/Majors," National Center for Education Statistics, available at <https://nces.ed.gov/collegenavigator/?id=215062>, accessed August 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

peers have to fostering intellectual curiosity even if expenditures per student in this field exceed revenues per student.

- Georgetown maintains a Department of Theology and Religious Studies that houses two required core curriculum courses for all undergraduates, but less than 0.9 percent of the undergraduate student body receives a degree from this department.⁴⁶ Similarly, Notre Dame's College of Arts and Letters offers undergraduate degrees in Theology,⁴⁷ while the university's Kroc Institute has offered undergraduate students the opportunity to major in Peace Studies for over three decades, so that students can "explore questions of peace, violence, and justice."⁴⁸ In 2023, Notre Dame conferred 12 bachelor's degrees in Theology and none in Peace Studies.⁴⁹ Georgetown's and Notre Dame's decisions to maintain these departments reflects the commitment that Defendants and their peers make to support academic programs aligned with their missions, even if they only appeal to the needs and interests of a small number of students.
- Cornell has 14 different programs under its new artificial intelligence ("AI") initiative and plans to hire high-profile senior faculty to expand the initiative.⁵⁰ In another example, in 2018, MIT announced an investment of \$1 billion in computing and AI to stay at the forefront of academic research and teaching in this area.⁵¹ Cornell's and MIT's new academic offerings reflect the commitment that Defendants and their peers make to evolve and improve their academic programs and course offerings to stay current with emerging fields.

⁴⁶ "Georgetown University Common Data Set," Common Data Set Initiative, 2023-2024, available at <https://georgetown.app.box.com/s/i6ct2x531j7aso2ka3kvw2blur82embn>, accessed August 4, 2024, p. 24; "Undergraduate Program," Georgetown University Department of Theology and Religious Studies, available at <https://theology.georgetown.edu/undergraduate/>, accessed July 6, 2024.

⁴⁷ "Department of Theology - Major," University of Notre Dame, available at <https://theology.nd.edu/major-minors/major/>, accessed August 3, 2024.

⁴⁸ "KROC Institute for International Peace Studies," University of Notre Dame, available at <https://kroc.nd.edu/undergraduate/>, accessed August 3, 2024.

⁴⁹ "University of Notre Dame Programs/Majors," National Center for Education Statistics, available at <https://nces.ed.gov/collegenavigator/?id=152080>, accessed August 7, 2024.

⁵⁰ "Leading the Way in Artificial Intelligence Research," Cornell University, available at <https://ai.cornell.edu/>, accessed July 6, 2024.

⁵¹ "MIT Reshapes Itself to Shape the Future," MIT News, October 15, 2018, available at <https://news.mit.edu/2018/mit-reshapes-itself-stephen-schwarzman-college-of-computing-1015>, accessed July 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

35. *Highly qualified and accomplished faculty and their research.* Faculty are critical for enriching a school's academic environment and attracting the brightest students through their teaching, advising and mentoring, and research. Defendants and their peers offer unrivaled opportunities for undergraduate students to interact with world-class scholars. For example, in 2021, MIT had a student-faculty ratio of 3:1 and faculty included 10 Nobel Prize winners and 26 MacArthur "Genius" Fellows.⁵² MIT also annually hosts visiting scholars "at the forefront of their respective fields" in support of their mission of "advancing knowledge and educating students."⁵³ Additionally, Defendants and their peers expend considerable resources to support faculty research, which in turn enhances the learning environment through the development of additional teaching materials and opportunities for students to engage in research. For example, MIT houses an Undergraduate Research Opportunities Program to connect undergraduate students directly with cutting-edge faculty research.⁵⁴ Defendants and their peers support faculty research even if it is relatively obscure.
36. *Residential facilities and staff.* A core feature of student life at Defendant and peer schools is the residential living-learning experience. Defendants and their peers devote substantial resources to developing and maintaining residential facilities and related programming that foster student interactions outside of the classroom, creating a sense of community and preparing students to be citizens of the world by learning to interact with a diverse set of

⁵² "MIT Facts 2021," Massachusetts Institute of Technology, 2021, available at <https://facts.mit.edu/wp-content/uploads/2022/03/MIT-Facts-2021-Accessible-with-Cover.pdf>, accessed July 6, 2024, pp. 4, 14-15.

⁵³ "MIT welcomes nine MLK Visiting Professors and Scholars for 2023," Massachusetts Institute of Technology, available at <https://news.mit.edu/2023/mit-welcomes-mlk-visiting-professors-scholars-0927>, accessed July 6, 2024.

⁵⁴ "MIT Undergraduate Research Opportunities Program," Massachusetts Institute of Technology, available at <https://urop.mit.edu/>, accessed July 6, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

peers. For example, nearly 6,000 of Penn's undergraduates are divided amongst 13 residential College Houses. Each House has a resident Faculty Director and one or more faculty fellows, as well as amenities to enhance the learning and community experience such as free tutoring services, cafes, and workshops and courses.⁵⁵ Notre Dame "affirms the value of in-person community-style residential living as an essential component of the holistic formation of a Notre Dame education," requiring all undergraduate students to live on-campus for at least six semesters.⁵⁶ To that end, Notre Dame maintains 32 on-campus undergraduate residence halls, each of which "has its own unique history, set of traditions, rector, chapel, mascot, colors, and signature event."⁵⁷

37. *Student affairs staff and resources.* Defendants' and their peers' student affairs offices provide staff, programming, and resources to support the student experience. This includes sponsoring student organizations, speakers, events, public service opportunities, club and intramural sports, and counseling and mental health services. In order for students to be successful, schools need to provide the resources necessary to support their learning, which may include expanding their offerings of academic coaching, counseling resources, and targeted student affairs programming for students from disadvantaged backgrounds. Defendants and their peers provide their students with many different types of opportunities. For example, Notre Dame supports over 500 recognized student groups,

⁵⁵ "About the College House System at Penn," University of Pennsylvania, available at <https://www.collegehouses.upenn.edu/about>, accessed July 6, 2024; "Living Options," University of Pennsylvania, available at <https://residential-services.business-services.upenn.edu/living-options>, accessed July 6, 2024.

⁵⁶ "Residential Life - Current Students," University of Notre Dame, available at <https://residentiallife.nd.edu/undergraduate/apply-for-housing/apply-for-fall-semester-housing/current-students/>, accessed August 3, 2024.

⁵⁷ "Residential Life - Residence Halls," University of Notre Dame, available at <https://residentiallife.nd.edu/undergraduate/residence-halls/>, accessed August 3, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

including groups for first-generation students, an amateur radio club, a bagpipe band, and numerous community service organizations.⁵⁸ Schools encourage these extracurricular activities to engage students holistically, to enrich students' learning outside of the classroom, and to create an engaged and vibrant community.

38. *Other educational facilities.* Defendants and their peers provide and maintain infrastructure such as historical buildings, libraries (including library holdings and rare book collections), archives, museums, laboratories, digital facilities, and other physical assets. For example, Cornell's library system holds over eight million volumes including a Rare and Manuscript collection with an additional 500,000 rare books and 80 million manuscripts.⁵⁹ Cornell libraries spend approximately \$18 million annually on collection development to maintain and expand access to research and teaching materials.⁶⁰ Notre Dame's Basilica of the Sacred Heart, which was added to the National Register of Historic Places in 1978, is home to both the world's largest collection of 19th century French stained glass and the oldest carillon in North America.⁶¹ These historical archives and resources benefit not only students attending Defendants and peer schools, but also visiting scholars and the broader community through exhibitions and public tours.⁶²

⁵⁸ "Discover unique opportunities at the University of Notre Dame," NDCentral, available at <https://nd.campuslabs.com/engage/>, accessed July 6, 2024; "Organizations," NDCentral, available at <https://nd.campuslabs.com/engage/organizations>, accessed July 6, 2024.

⁵⁹ "Collections," Cornell University, available at <https://www.library.cornell.edu/collections/>, accessed July 6, 2024; "Rare and Manuscript Collections," Cornell University, available at <https://rare.library.cornell.edu/>, accessed July 6, 2024.

⁶⁰ "Collection Development," Cornell University, available at <https://www.library.cornell.edu/collections/collection-development/>, accessed July 6, 2024.

⁶¹ "The Basilica of the Sacred Heart," University of Notre Dame, available at <https://basilica.nd.edu/about/>, accessed July 23, 2024.

⁶² "Rare and Manuscript Collections," Cornell University, available at <https://rare.library.cornell.edu/>, accessed July 6, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

39. *Community partnerships.* Defendants and their peers seek to foster their students' civic education and engagement by partnering with social-mission organizations in their broader communities. For example:

- Cornell, as part of its land-grant mission, reaches 1.7 million New Yorkers each year through its agricultural extension services, including education about agricultural innovations and youth development programming.⁶³ Cornell also offers students over 270 community-engaged learning courses and the opportunity to count work in local non-profits and schools toward federal work-study requirements.⁶⁴ Cornell tracks its local economic impact, and in 2023 noted that it contributed millions of dollars to the local economy in the form of local spending, purchasing, taxes, and job creation, including \$388 million in external federal, state, and corporate research funding spent locally.⁶⁵
- Georgetown hosts the Beeck Center for Social Impact + Innovation, which supports initiatives that provide Georgetown students with experiential learning opportunities and increase government capacity and benefits delivery, such as through data sharing, developing community resources based on research and analysis, hosting public events, and building networks.⁶⁶ Additionally, Georgetown's Center for Social Justice hosts several programs and organizations that connect Georgetown students with local schools, community programs, and nonprofits, each focusing on fields such as education, juvenile justice, immigrant communities, and homelessness.⁶⁷

⁶³ "Engagement," Cornell University, available at <https://www.cornell.edu/engagement/>, accessed July 6, 2024; "About Cornell Cooperative Extension," Cornell University, available at <https://cals.cornell.edu/cornell-cooperative-extension/about-cornell-cooperative-extension>, accessed July 6, 2024.

⁶⁴ "Engagement," Cornell University, available at <https://www.cornell.edu/engagement/>, accessed July 6, 2024.

⁶⁵ "Local Economic Snapshot," Cornell University, June 30, 2023, available at <https://economicimpact.cornell.edu/local/>, accessed July 19, 2024.

⁶⁶ "2023 Impact Report," Beeck Center for Social Impact, 2023, available at <https://beeckcenter.georgetown.edu/wp-content/uploads/2024/03/Beeck-2023-Impact-Report.pdf>, accessed July 23, 2024, pp. 12-18.

⁶⁷ "CSJ Programs," Georgetown University, available at <https://csj.georgetown.edu/CSJprograms/>, accessed July 23, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Since 2001, MIT has maintained an online collection of course materials that is free to the public through its OpenCourseWare to provide greater access to education globally.⁶⁸
- Since 1983, Notre Dame's Center for Social Concerns has facilitated partnerships between its faculty, staff, students and 600 community-based organizations to advance justice education and research. The Center's goal is "to advance the dignity and wellbeing of all people—especially the marginalized—by promoting flourishing communities both locally and globally through a mix of moral inquiry, research, arts engagement, and action."⁶⁹
- Penn's Netter Center for Community Partnerships provides a variety of community engagement initiatives, including academic courses that connect Penn students with community projects and partnerships with local schools and community organizations.⁷⁰

40. The breadth of educational programming, high-quality faculty and staff, and other student resources that Defendants and their peers make available to students are far more expansive than any offerings that for-profit businesses provide to their paying customers. This includes for-profit postsecondary schools, which tend to offer far fewer educational options, do not emphasize individual faculty accomplishment or support faculty research activities, do not tend to offer residential facilities, and often do not offer in-person instruction as I discuss in greater detail in **Section II.D.1**.

⁶⁸ "MIT OpenCourseWare," Massachusetts Institute of Technology, available at <https://ocw.mit.edu/about/>, accessed July 23, 2024.

⁶⁹ "About," Center for Social Concerns, available at <https://socialconcerns.nd.edu/about/>, accessed August 3, 2024.

⁷⁰ "History of the Netter Center," Netter Center for Community Partnerships at the University of Pennsylvania, available at <https://www.nettercenter.upenn.edu/about-center/history-netter-center>, accessed July 25, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

2. Defendants and Their Peers Heavily Subsidize Their Students' Educations

41. Defendants' and their peers' investments in their students' educational experiences are costly. Despite these costs, each Defendant sets the maximum amount of revenues that it could receive from students at less than the amount it costs to educate them. This can be seen in publicly available data from the Integrated Postsecondary Education Data System ("IPEDS"), an annual survey collected by the U.S. Department of Education as a requirement of receiving federal aid.⁷¹
42. IPEDS data include measures of potential revenues schools may receive from undergraduate students (i.e., published tuition,⁷² required fees, and on campus room and board), as well as measures of various types of student educational expenditures (i.e., instruction, academic support, student services, institutional support, and auxiliary enterprises) and research expenditures. IPEDS does not report educational expenditures on undergraduate students separately from expenditures on graduate students because schools' resources support both undergraduate and graduate students. While the extent to which each expenditure category is focused on undergraduate versus graduate students can vary by category and across schools depending on the specific school's characteristics and composition, I use average expenditures across all students (i.e., undergraduate and graduate) as a proxy for average expenditures across undergraduate students. I note that

⁷¹ IPEDS gathers information from all higher education institutions that participate in federal student financial aid programs and includes measures related to institutional prices, enrollment, student financial aid, student persistence and success, and institutional resources and finances. "About IPEDS," Integrated Postsecondary Education Data System, available at <https://nces.ed.gov/ipeds/about-ipeds>, accessed August 1, 2024.

⁷² IPEDS reports both out-of-state and in-state tuition for participating higher education institutions. For private higher education institutions, such as Defendants, these values are the same. Backup materials to this report (IPEDS, Expenditures v. Revenues).

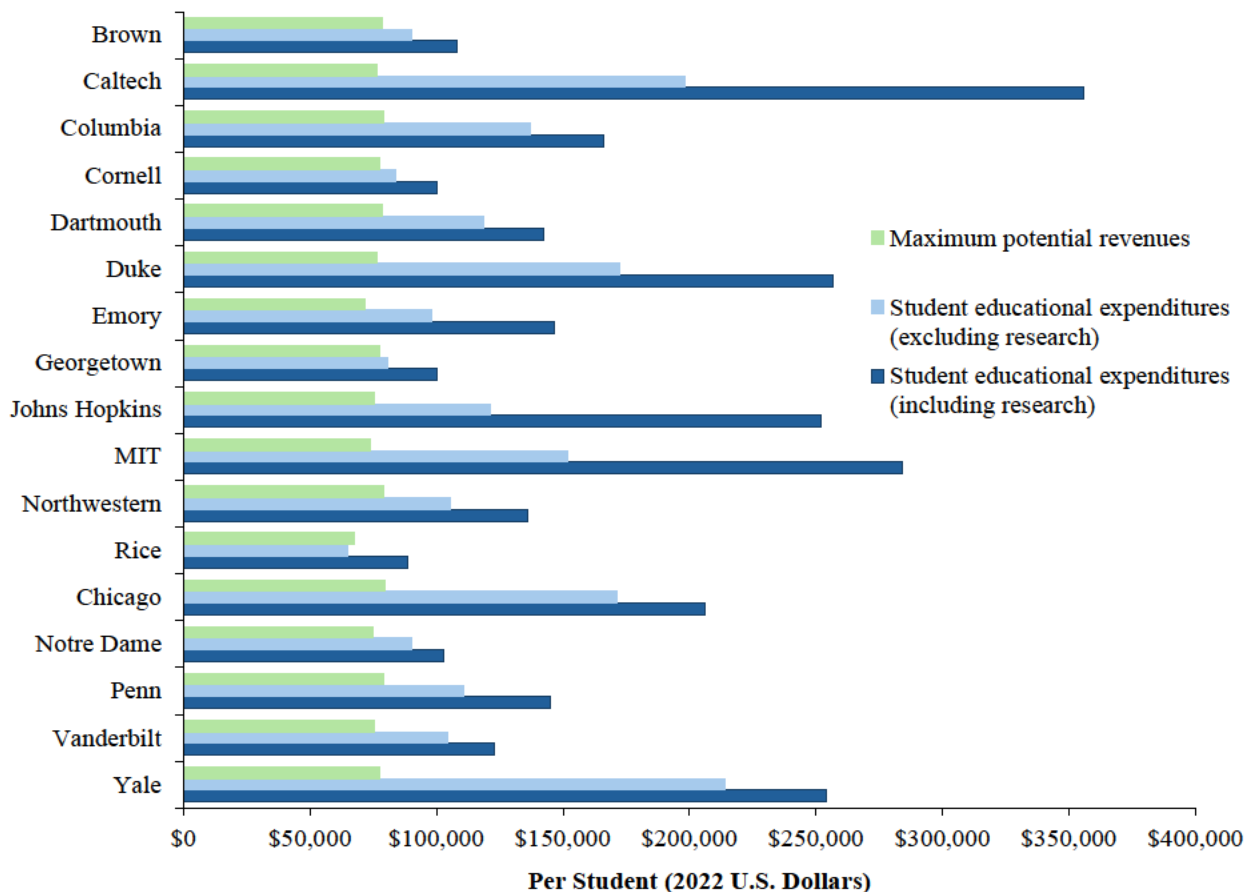
ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

based on my experience, for many categories this is a conservative estimate, as expenditures on academic support and student services tend to be mostly focused on undergraduate students.

43. As shown in **Figure 1**, analysis of the IPEDS data shows that for each Defendant, the maximum amount of revenues that a school could potentially receive from an undergraduate student, assuming the student pays the full published tuition, required fees, and on-campus room and board (which, as I discuss below, is more than the amount many students actually pay) is lower than the average institutional educational and research expenditures per student in the academic year 2021-2022. When excluding expenditures on research, this relationship holds for all Defendants other than Rice.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Figure 1
Institutional Educational Expenditures Per Student Exceed Maximum Potential Revenues
Per Student, by Defendant in 2021-2022⁷³

**Notes:**

[1] Maximum potential revenues per student at a given school is calculated as the sum of the IPEDS fields “published out-of-state tuition and fees” and “on campus room and board” at the given school. Maximum potential revenues are reported for the 2021-2022 academic year.

[2] Student educational expenditures per student at a given school is calculated as the sum of the IPEDS fields “instruction-total amount,” “academic support-total amount,” “student service-total amount,” “institutional support-total amount,” “auxiliary enterprises-total amount,” and “research-total amount,” when included, divided by the total number of students at the given school. Because IPEDS does not distinguish between expenditures on undergraduate versus graduate students, the total number of students at a given school is calculated as the sum of the IPEDS fields “estimated full-time equivalent undergraduate enrollment” and “estimated full-time equivalent graduate enrollment” at the given school. Student educational expenditures per student are reported for the 2022 fiscal year.

[3] Emory’s Oxford College is listed separately from Emory University and is therefore excluded from this analysis.

⁷³ Backup materials to this report (IPEDS, Expenditures v. Revenues); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

44. For example, **Figure 1** shows maximum potential revenues from undergraduate students at MIT during the 2021-2022 academic year were \$73,978 per student.⁷⁴ By contrast, in its 2022 fiscal year,⁷⁵ the sum of MIT's student educational expenditures were \$152,095 per student.⁷⁶ Including research expenditures increases MIT's 2022 fiscal year student educational expenditures to \$284,012 per student.⁷⁷ This same relationship holds for all Defendants when including their research expenditures per student, meaning that *all Defendants subsidize all of their undergraduate students' educations*, regardless of whether or not the student receives any financial aid.
45. This has also been true on average across all Defendant schools since the 2003-2004 academic year, as shown in **Figure 2**. As I discuss further in **Section VII**, non-profit schools receive revenue not only from tuition and fees but also from gifts, endowment income, and government sources. These other resources allow Defendants and their peers to set the amount that they charge students in tuition, fees, and room and board lower than their production costs.⁷⁸

⁷⁴ Backup materials to this report (IPEDS, Expenditures v. Revenues). National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>.

⁷⁵ MIT's fiscal year 2022 ran from July 1, 2021 through June 30, 2022. Shor, Glen, "Massachusetts Institute of Technology Report of the Treasurer for the Year Ended June 30, 2022," PricewaterhouseCoopers, October 7, 2022, available at <https://vpf.mit.edu/sites/default/files/downloads/TreasurersReport/MITTreasurersReport2022.pdf>, accessed August 1, 2024.

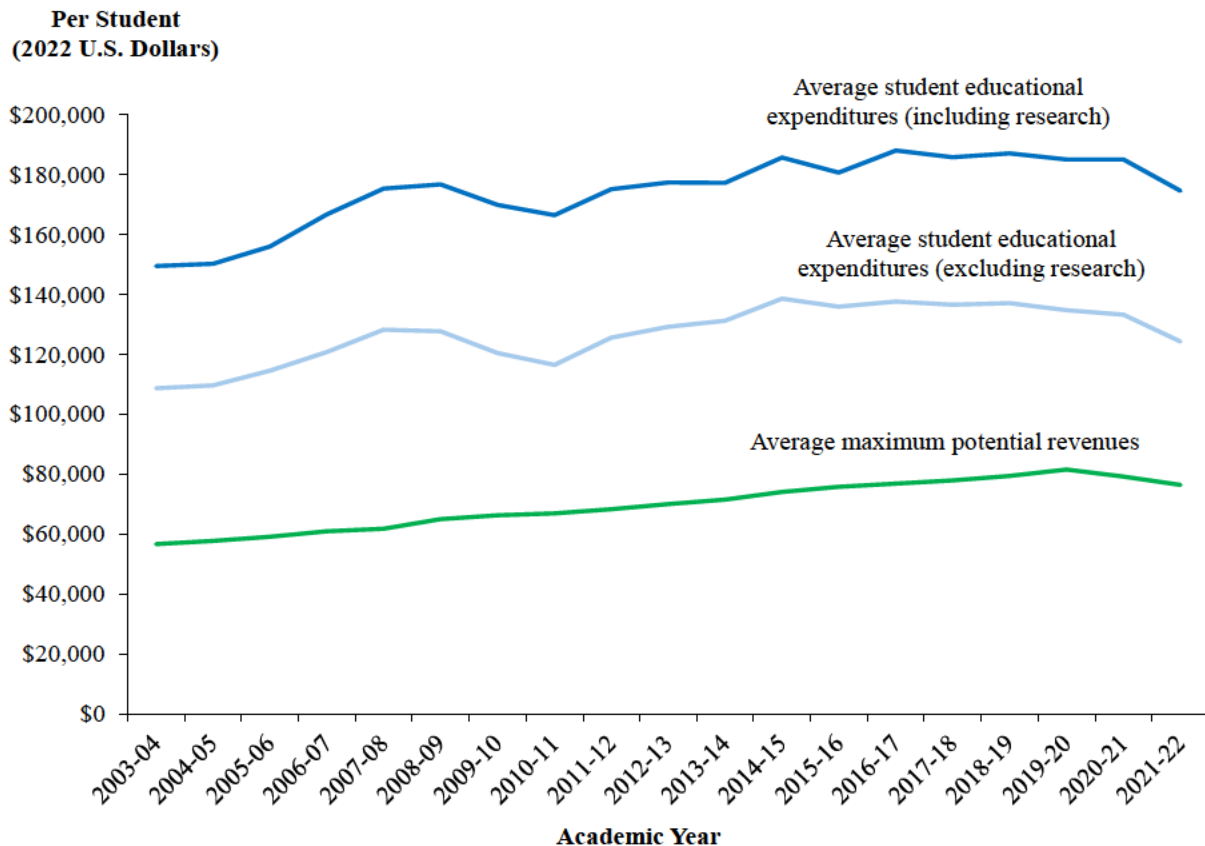
⁷⁶ Backup materials to this report (IPEDS, Expenditures v. Revenues); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>.

⁷⁷ Backup materials to this report (IPEDS, Expenditures v. Revenues); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>.

⁷⁸ Winston (1997).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Figure 2
Defendants' Average Institutional Educational Expenditures Per Student Exceed Average Maximum Potential Revenues Per Student⁷⁹

**Notes:**

[1] Maximum potential revenues per student at a given school is calculated as the sum of the IPEDS fields “published out-of-state tuition and fees” and “on campus room and board” at the given school. Maximum potential revenues are reported by academic year. Average maximum potential revenues per student in a given year is calculated as the sum of maximum potential revenues per student across Defendants in the given year divided by 17, the number of Defendants.

[2] Student educational expenditures per student at a given school is calculated as the sum of the IPEDS fields “instruction-total amount,” “academic support-total amount,” “student service-total amount,” “institutional support-total amount,” “auxiliary enterprises-total amount,” and “research-total amount,” when included, divided by the total number of students at the given school. Because IPEDS does not distinguish between expenditures on undergraduate versus graduate students, the total number of students at a given school is calculated as the sum of the IPEDS fields “estimated full-time equivalent undergraduate enrollment” and “estimated full-time equivalent graduate enrollment” at the given school. Student educational expenditures per student are reported in fiscal years. Average student

⁷⁹ Backup materials to this report (IPEDS, Expenditures v. Revenues); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>; “Consumer Price Index for All Urban Consumers: All Items in U.S. City Average,” Federal Reserve Bank of St. Louis, June 2024, available at <https://fred.stlouisfed.org/series/CPIAUCNS>, accessed August 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

educational expenditures per student across Defendants in a given year is calculated as the sum of average student educational expenditures per student across Defendants in the given year divided by 17, the number of Defendants.

[3] Maximum potential revenues per student and average educational expenditures per student are adjusted for inflation to 2022 dollars using the consumer price index ("CPI"). For academic years, I apply the inflation adjustment to the year of the spring semester. For example, nominal amounts in academic year 2008-2009 are treated as 2009 dollars. For fiscal years, I apply the inflation adjustment to the listed year. For example, nominal amounts in FY09 are treated as 2009 dollars.

[4] All 17 Defendants are included for the entire period, regardless of their membership in the 568 Group. Emory's Oxford College is listed separately from Emory University but does not consistently report information between 2008-2009 and 2021-2022 and is therefore excluded from this analysis.

46. In addition to setting the maximum amount of revenues that they could receive from undergraduate students less than the amount it costs to educate those students, each Defendant commits to meeting the financial need of admitted students, which is defined as the difference between a student's EFC and the school's COA with an individualized financial aid package.⁸⁰ A school's COA is the total advertised price of attending the school and includes tuition and fees, room and board, as well as individually estimated transportation costs, books, and other expected expenses.⁸¹ The policy of meeting the difference between a student's COA and EFC is known as a full-need policy, and many Defendants have pursued such a policy prior to the Class Period.⁸² Each Defendant meets

⁸⁰ The backup materials to this report contain information on the Defendants' full-need policies. Backup materials to this report (Full-Need Policies); JHULIT_0000122562 ("COFHE Yellowbook for 2023-2024," Consortium on Financing Higher Education, 2023-2024) (provides information on the full-need policies for Brown, Columbia, Cornell, Dartmouth, Emory, Georgetown, Johns Hopkins, MIT, Northwestern, Rice, Chicago, Penn, Vanderbilt, and Yale); DUKE568_0033960 ("Meeting of the Resources Committee of the Board of Trustees," Duke University, February 26, 2021) (provides information on Duke's full-need policy); Deposition of Malina Chang, Director of Student Financial Aid at California Institute of Technology, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 September 13, 2023 ("Chang Deposition"), pp. 94:9-94:14 (describing Caltech's full-need policy); Deposition of John Affleck-Graves, Professor of Finance in the Department of Finance at University of Notre Dame, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 January 24, 2023 ("Affleck-Graves Deposition"), pp. 220:20-221:18 (describing Notre Dame's full-need policy).

⁸¹ Cairns, Hilary, "The Difference Between a School's Sticker Price and Net Price – And How to Estimate It," CollegeRaptor, December 21, 2022, available at <https://www.collegeraptor.com/find-colleges/articles/affordability-college-cost/the-difference-between-a-schools-sticker-price-and-net-price-and-how-to-estimate-it>, accessed August 20, 2023 ("The sticker price of a college is the advertised price of attending a full year. It can also be called the 'Cost of Attendance' or COA. This number includes tuition, of course, but it also includes: room and board[,] transportation costs[,] fees[,] books[,] and] other expected expenses.").

⁸² For example, MIT adopted a full-need policy in 1867, Georgetown in 1978, Cornell in 1998, and Notre Dame in 1999-2000. "MIT Need-Based Aid Dates Back to 1867," MIT News, 1992, available at <https://news.mit.edu/1992/aid-0506>, accessed April 29, 2024; GTWNU_0000390613 ("Policies and Procedures

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

students' full need with a combination of institutional, federal, state, and private sources, and students' financial aid packages can be a combination of grants, loans, and work-study.⁸³ While Defendants could primarily meet students' full need with loans and work-study, which students either have to pay back or work for, analysis of IPEDS data shows that Defendants devote substantial school resources to provide institutional grant aid to further subsidize some students' education. Institutional grant aid is funded by the school and does not need to be paid back or worked for, thus directly decreasing potential revenues the school can receive from students receiving such aid.

47. Examining IPEDS data on the sources of financial aid expenditures, **Figure 3** shows that between the 2008-2009 and 2021-2022 academic years,⁸⁴ across all Defendants, the share of institutional grant aid increased from just over 80 percent of all aid given to nearly 90 percent, while the share of grant aid from federal, state, and local sources decreased over the same time period.⁸⁵ Further, **Figure 3** shows that Defendants increased the total amount of institutional grant aid given by 63 percent, from \$472 million in 2008-2009 to \$771 million in 2021-2022.⁸⁶ Over this time period, Cornell awarded a total of \$972 million in

Manual 2023-2024,” Georgetown University, 2023-2024) at 624; CORNELL_LIT0000245115 (“Undergraduate Financial Aid Task Force - Final Report,” Cornell University, April 27, 2012) at 117; Affleck-Graves Deposition, 220:20-221:22.

⁸³ “Types of Financial Aid: Loans, Grants, and Work-Study Programs,” Federal Student Aid, available at <https://studentaid.gov/understand-aid/types>, accessed August 20, 2023.

⁸⁴ IPEDS reports total financial aid dollars by source starting in the 2008-2009 academic year.

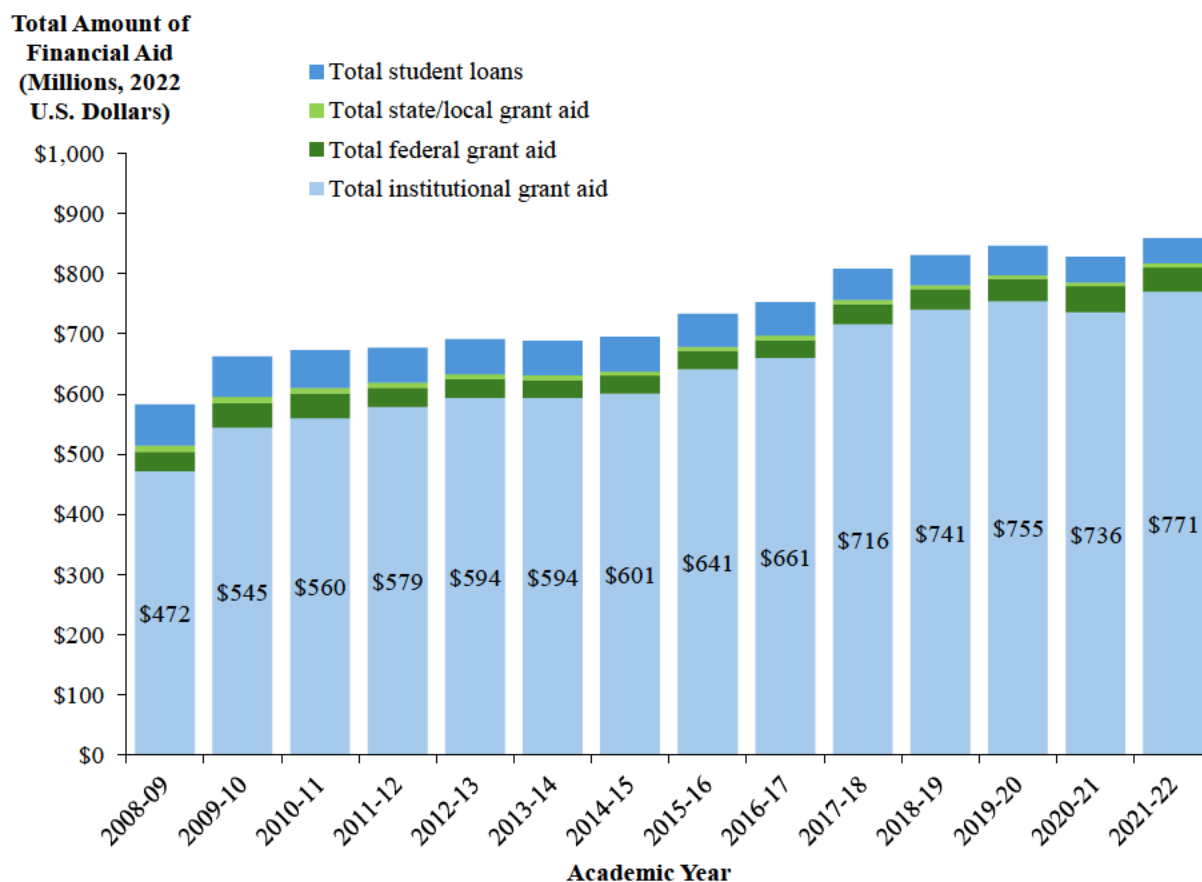
⁸⁵ Backup materials to this report (IPEDS, Composition of Aid). National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>.

⁸⁶ Financial aid dollars are adjusted for inflation to 2022 dollars using the CPI. For academic years, I apply the inflation adjustment to the year of the spring semester. For example, nominal amounts in academic year 2008-2009 are treated as 2009 dollars. Backup materials to this report (IPEDS, Composition of Aid); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>; “Consumer Price Index for All Urban Consumers: All Items in U.S. City Average,” Federal Reserve Bank of St. Louis, June 2024, available at <https://fred.stlouisfed.org/series/CPIAUCNS>, accessed August 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

institutional grant aid, Georgetown awarded a total of \$401 million, MIT awarded a total of \$428 million, Notre Dame awarded a total of \$677 million, and Penn awarded a total of \$766 million in institutional grant aid.⁸⁷

Figure 3
Defendants Devote Substantial Resources to Providing Institutional Grant Aid⁸⁸



Notes:

[1] Financial aid amounts come from the IPEDS fields “total amount of student loans awarded to full-time first-time undergraduates,” “total amount of institutional grant aid awarded to full-time first-time undergraduates,” “total amount of state/local grant aid awarded to full-time first-time undergraduates,” and “total amount of federal grant aid awarded

⁸⁷ Financial aid dollars are adjusted for inflation to 2022 dollars using the CPI. For academic years, I apply the inflation adjustment to the year of the spring semester. For example, nominal amounts in academic year 2008-2009 are treated as 2009 dollars. Backup materials to this report (IPEDS, Composition of Aid); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>.

⁸⁸ Backup materials to this report (IPEDS, Composition of Aid); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>; “Consumer Price Index for All Urban Consumers: All Items in U.S. City Average,” Federal Reserve Bank of St. Louis, June 2024, available at <https://fred.stlouisfed.org/series/CPIAUCNS>, accessed August 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

to full-time first-time undergraduates.” These fields are only available for academic years 2008-2009 through 2021-2022. IPEDS does not include information on private scholarships.

[2] Financial aid dollars are adjusted for inflation to 2022 dollars using the CPI. For academic years, I apply the inflation adjustment to the year of the spring semester. For example, nominal amounts in academic year 2008-2009 are treated as 2009 dollars.

[3] All 17 Defendants are included for the entire period, regardless of their membership in the 568 Group. Emory’s Oxford College is listed separately from Emory University but does not consistently report information between 2008-2009 and 2021-2022 and is therefore excluded from this analysis.

48. Increases in institutional grant aid between 2008-2009 and 2021-2022 at Defendant schools far outpaced increases in institutional student charges. For example, tuition, fees, and room and board increased by 18.0 percent at Notre Dame, but the total amount of institutional grant aid awarded grew by 67.0 percent.⁸⁹ Similarly, at Cornell, tuition, fees, and room and board increased by 17.9 percent but the total amount of institutional grant aid awarded increased by 106.1 percent.⁹⁰
49. Ultimately, institutional grant aid awarded by Defendants has had a large impact on decreasing the price students actually pay for attendance at Defendant schools. Instead of paying a school’s advertised COA, due to institutional grant aid offered by Defendants, many students actually pay a lower “net price.”⁹¹ In the 2021-2022 academic year just over

⁸⁹ Tuition, fees, room and board, and institutional grant aid dollars are adjusted for inflation to 2022 dollars using the CPI. For academic years, I apply the inflation adjustment to the year of the spring semester. For example, nominal amounts in academic year 2008-2009 are treated as 2009 dollars. Backup materials to this report (IPEDS, Composition of Aid); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>; “Consumer Price Index for All Urban Consumers: All Items in U.S. City Average,” Federal Reserve Bank of St. Louis, June 2024, available at <https://fred.stlouisfed.org/series/CPIAUCNS>, accessed August 7, 2024.

⁹⁰ Tuition, fees, room and board, and institutional grant aid dollars are adjusted for inflation to 2022 dollars using the CPI. For academic years, I apply the inflation adjustment to the year of the spring semester. For example, nominal amounts in academic year 2008-2009 are treated as 2009 dollars. Backup materials to this report (IPEDS, Composition of Aid); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>; “Consumer Price Index for All Urban Consumers: All Items in U.S. City Average,” Federal Reserve Bank of St. Louis, June 2024, available at <https://fred.stlouisfed.org/series/CPIAUCNS>, accessed August 7, 2024.

⁹¹ Cairns, “The Difference Between a School’s Sticker Price and Net Price – And How to Estimate It,” CollegeRaptor, December 21, 2022, available at <https://www.collegeraptor.com/find-colleges/articles/affordability-college-cost/the-difference-between-a-schools-sticker-price-and-net-price-and-how-to-estimate-it>, accessed August 20, 2023 (“The big difference between sticker price and net price for college is that ‘net price’ refers to what the student will *actually* pay to attend a given school for a semester. Students can

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

half of first-year students at Defendant schools received institutional grant aid, thus decreasing those students' net prices below their COAs, and decreasing potential revenues schools could receive from these students.⁹²

50. As shown in **Figure 4**, despite rising COA, the average net price charged by Defendants remained relatively constant for all students receiving financial aid between 2008-2009 and 2021-2022. This is due directly to the fact that Defendants were increasing institutional grant aid over the same period, as shown in **Figure 3**. Importantly, institutional grant aid at Defendant schools covered the overwhelming share of student charges on average. For example, in 2021-2022, institutional grant aid covered 97 percent of tuition and fees and 71 percent of the average COA for a student at MIT awarded financial aid; at Georgetown, institutional grant aid covered 74 percent of tuition and fees and 54 percent of the average COA for a student awarded financial aid.⁹³

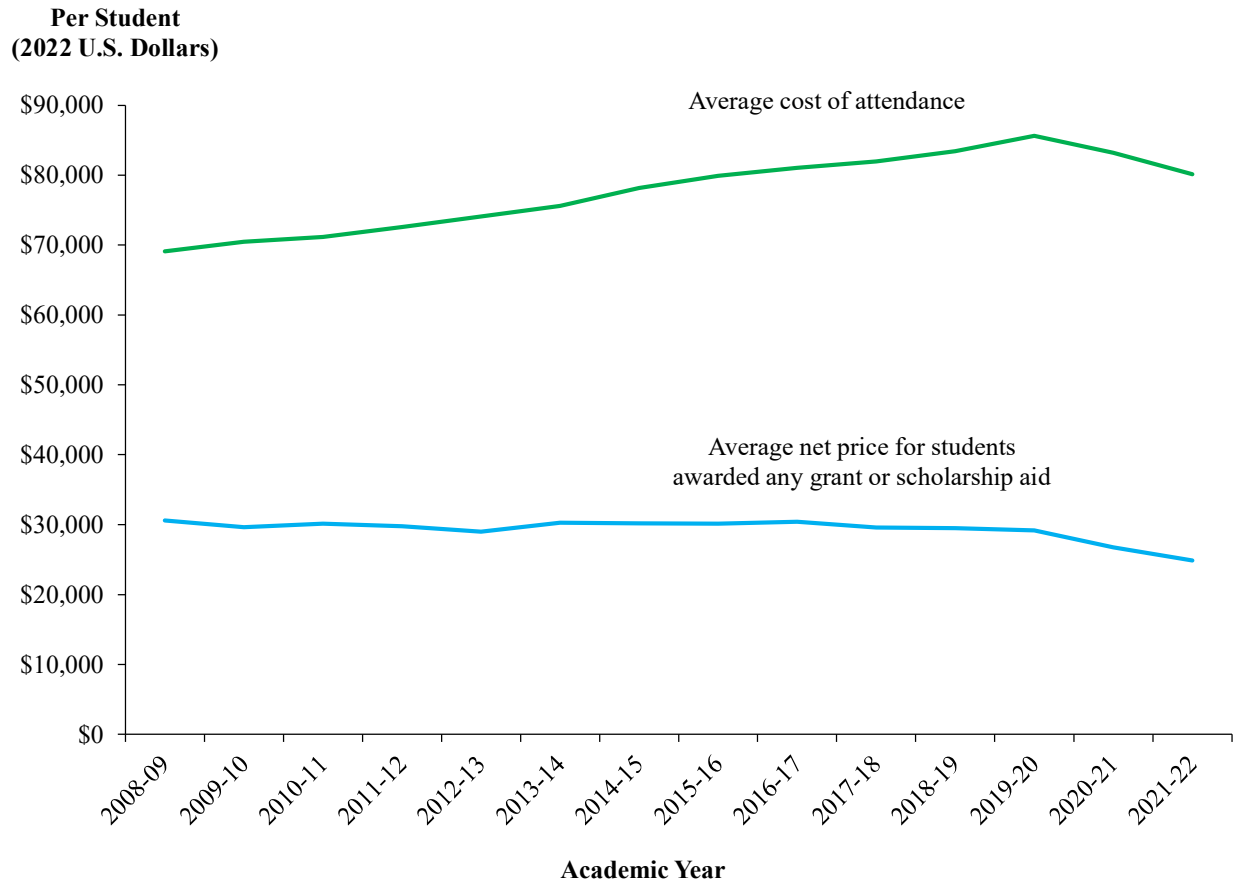
arrive at this number by taking the sticker price and subtracting any aid that is expected which can include merit-based scholarships, need-based grants, or other financial aid programs from schools, state government, federal government, and organizations.”).

⁹² Backup materials to this report (IPEDS, Composition of Aid); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>.

⁹³ Backup materials to this report (IPEDS, Composition of Aid); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Figure 4
Defendants' Average Net Price Decreased Over Time for Aided Students⁹⁴

**Notes:**

[1] A school's published cost of attendance is reported in IPEDS in the field "Total Price." IPEDS calculates this field as the sum of tuition, required fees, room and board, books and supplies, and other expenses for on-campus first year students. Average cost of attendance in a given year is calculated as the sum of cost of attendance across Defendants in a given year divided by 17, the number of Defendants.

[2] Net price is reported in IPEDS in the field "Average net price for students awarded grant or scholarship aid (current year)." IPEDS calculates this field by subtracting the average amount of aid students receive from federal, state, and local government sources, as well as institutional grant and scholarship aid from cost of attendance. This field is available starting in the 2008-2009 academic year. Average net price for students awarded any grant or scholarship aid in a given year is calculated as the sum of net prices across Defendants in the given year divided by 17, the number of Defendants.

[3] Average net price for students awarded any grant or scholarship aid and average cost of attendance are adjusted for inflation to 2022 dollars using the CPI. For academic years, I apply the inflation adjustment to the year of the spring semester. For example, nominal amounts in academic year 2008-2009 are treated as 2009 dollars.

⁹⁴ Backup materials to this report (IPEDS, Net Price); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>; "Consumer Price Index for All Urban Consumers: All Items in U.S. City Average," Federal Reserve Bank of St. Louis, June 2024, available at <https://fred.stlouisfed.org/series/CPIAUCNS>, accessed August 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

[4] All 17 Defendants are included for the entire period, regardless of their membership in the 568 Group. Emory's Oxford College is listed separately but does not consistently report information between 2008-2009 and 2021-2022 and is therefore excluded from this analysis.

51. In summary, in pursuit of their missions, Defendants and their peers expend their resources in a range of ways that reduce rather than increase their revenues. They subsidize all undergraduate students due to their educational expenditures exceeding the maximum amount of revenue they could collect from students, so that even a full-paying student does not pay for the full cost of their education. Additionally, they use school resources to fund institutional aid in order to meet financial aid commitments, further decreasing the revenues received from students. By contrast, for-profit businesses typically do not maintain activities or products that consistently cost more to provide than the revenue generated.⁹⁵

B. Defendants and Their Peers Focus on the Size and Composition of the Student Body in Furtherance of Their Educational Missions

52. Defendants and their peers focus incredible energy crafting a student body of appropriate size and range of characteristics. First, even with high admissions standards to ensure they admit high-achieving students capable of handling a high standard of academic rigor, Defendants and their peers admit far fewer applicants to their schools than the number of qualified students who apply. This is despite the fact that they could raise tuition prices,

⁹⁵ Brealey et al. (2020), Chapter 1, p. 2 ("The investment decision also involves managing assets already in place and deciding when to shut down and dispose of assets when they are no longer profitable."). Winston (1997) also presents a car dealership as an example to illustrate that a business that sells its product at a price below the cost of making that product is a violation of how for-profit firms work. Winston (1997), p. 34.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

decrease aid, or enroll more (or only) full-pay students, which would eliminate hundreds of millions of dollars in financial aid expenditures for each school each year.⁹⁶

53. The number of applications Defendants and their peers receive in a given year has consistently increased, but class sizes have remained fairly constant.⁹⁷ For example, in 2015 (for the class of 2019), Penn received 37,268 applications but only accepted 3,787 freshmen.⁹⁸ In 2023 (for the class of 2027), Penn received 59,465 applications, a 59.6 percent increase in the number of applications from 2015, but still accepted only 3,489 freshmen.⁹⁹ Similarly, Georgetown received 19,478 applications in 2015 (for the class of 2019), which increased by 30.8 percent to 25,485 in 2023 (for the class of 2027), but only admitted about 3,300 freshmen in each of those years.¹⁰⁰ Schools have chosen not to expand their class sizes to meet demand, which would be a common practice for for-profit businesses. Instead, schools have prioritized maintaining smaller class sizes and lower student-faculty ratios in order to foster interactive classroom environments and an engaging

⁹⁶ McPherson, Michael S. and Morton O. Schapiro, *The Student Aid Game: Meeting Need and Rewarding Talent in American Higher Education*, Ewing, New Jersey, Princeton University Press, 1998, p. 16 (“[T]he best-endowed and most selective private colleges and universities in the nation [...] are schools with long waiting lists of highly qualified full-pay customers. They could easily fill their freshman classes with little or no spending on student aid. For these schools, student aid is a real cost, reflecting a choice by the institution to give up revenue from full-pay students to change the profile of the freshman class, aiming perhaps at socioeconomic or racial diversity or honoring a more abstract principle of admitting students without ability to pay.”).

⁹⁷ Bound, John et al., “Playing the Admissions Game: Student Reactions to Increasing College Competition,” *Journal of Economic Perspectives*, Vol. 23, No. 4, 2009, p. 1.

⁹⁸ “University of Pennsylvania Common Data Set,” Common Data Set Initiative, 2015-2016, available at <https://upenn.app.box.com/s/mivuljff57btij3f6af2ghgox2vrojq>, accessed August 1, 2024.

⁹⁹ “University of Pennsylvania Common Data Set,” Common Data Set Initiative, 2023-2024, available at <https://upenn.app.box.com/s/a1qh9mtwmjbmju373eva98zxeeff4vmu>, accessed August 1, 2024.

¹⁰⁰ “Georgetown University Common Data Set,” Common Data Set Initiative, 2015-2016, available at <https://georgetown.app.box.com/s/8vtoy67rj039e2tw6fk9knax92rhkpm3>, accessed August 1, 2024; “Georgetown University Common Data Set,” Common Data Set Initiative, 2023-2024, available at <https://georgetown.app.box.com/s/i6ct2x531j7aso2ka3kvw2blur82embn>, accessed August 4, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

educational experience in which students have the ability to interact with their high-quality faculties.¹⁰¹

54. Many of the applicants not offered admission by Defendants are highly accomplished.¹⁰² According to a 2017 Notre Dame press release, Notre Dame received a record number of applications from students with “academic accomplishments,” resulting in an incoming class where “more than 70 percent of [students] had a national test score or high school performance that the admissions office rated as being in the top one percent of the nation.”¹⁰³ However, only about a third of students with this level of academic success received an offer of admission from Notre Dame.¹⁰⁴
55. Given the number of highly qualified applicants, Defendants and their peers certainly *could* raise tuition prices, decrease aid, and enroll more (or only) full-pay students if the priority were to generate additional revenue (as would be expected for a for-profit organization). Instead, Defendants and their peers do the opposite, put great effort into their outreach,

¹⁰¹ See, for example, “What is Student/Professor Interaction Like? Are there Research Opportunities for Undergraduates?,” University of Pennsylvania Alumni, available at https://www.alumni.upenn.edu/s/1587/gid2/16/interior_1col.aspx?sid=1587&gid=2&calcid=15713&calpgid=2861&pgid=252&ecid=15715&crd=0&cid=15713, accessed August 5, 2024; “MIT Facts 2021,” Massachusetts Institute of Technology, 2021, available at <https://facts.mit.edu/wp-content/uploads/2022/03/MIT-Facts-2021-Accessible-with-Cover.pdf>, accessed July 6, 2024, p. 4; “Academic Life,” Georgetown University, available at <https://www.georgetown.edu/academics/>, accessed August 7, 2024.

¹⁰² “Best, Brightest and Rejected: Elite Colleges Turn Away Up to 95%,” The New York Times, available at <https://www.nytimes.com/2014/04/09/us/led-by-stanfords-5-top-colleges-acceptance-rates-hit-new-lows.html>, accessed July 6, 2024 (“Admissions directors at [the most selective colleges] say that most of the students they turn down are such strong candidates that many are indistinguishable from those who get in.”).

¹⁰³ Rooney, Shannon “Meet the Class of 2021: Notre Dame Welcomes its Next Class of High-Achieving, Service-focused Students,” University of Notre Dame, August 22, 2017, available at <https://admissions.nd.edu/visit-engage/stories-news/meet-the-class-of-2021-notre-dame-welcomes-its-next-class-of-high-achieving-service-focused-students/>, accessed July 6, 2024.

¹⁰⁴ Rooney, “Meet the Class of 2021: Notre Dame Welcomes its Next Class of High-Achieving, Service-focused Students,” University of Notre Dame, August 22, 2017, available at <https://admissions.nd.edu/visit-engage/stories-news/meet-the-class-of-2021-notre-dame-welcomes-its-next-class-of-high-achieving-service-focused-students/>, accessed July 6, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

recruitment, and admissions processes to attract and admit students with a range of backgrounds, talents, and interests.¹⁰⁵ This practice fulfills the schools' long-standing missions of contributing to society through education, including by cultivating a student body to ensure that the positive impacts of a rigorous and engaging education are available to a wide range of qualified students.

56. The specific composition of the student body is also incredibly important to Defendants' and their peers' missions because increasing access for students from every walk of life has also the benefit of improving students' quality of education through a concept known as peer effects.¹⁰⁶ Unlike with most products and services, in higher education, students play an important role in the production of education as both inputs and outputs to the process. While student graduation and other outcomes are considered major outputs of colleges and universities, students also participate in the creation of the educational experience itself by contributing to other students' educational outcomes, and their own educational outcomes are impacted by their peers, both inside and outside of the classroom.
57. Research has found that peer effects can improve educational outcomes. For example, studies have demonstrated that the academic achievement level of a student's roommate can have a statistically significant effect on the student's college GPA, such as through

¹⁰⁵ Rigol, Gretchen W., "Admissions Decision-Making Models: How U.S. Institutions of Higher Education Select Undergraduate Students," College Board, 2003, available at <https://files.eric.ed.gov/fulltext/ED562589.pdf>, accessed August 4, 2024, p. 7 ("[F]inding the best balance of students with different academic interests, different talents and skills, and different background characteristics is the ultimate aim of the admissions process.").

¹⁰⁶ See, for example, Winston, Gordon C., "Subsidies, Hierarchy and Peers: The Awkward Economics of Higher Education," *Journal of Economic Perspectives*, Vol. 13, No. 1, 1999, pp. 17-18, 24-26. For a review of such research, see Sacerdote, Bruce, "Chapter 4 - Peer Effects in Education: How Might They Work, How Big Are They and How Much Do We Know Thus Far?," *Handbook of the Economics of Education*, Vol. 3, 2011, pp. 269-271.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

reinforcing levels of academic effort.¹⁰⁷ Student background and social behavior have also been shown to impact a roommate's performance, behavior, and interests.¹⁰⁸ Research has also increasingly demonstrated that having student bodies made up of a wide range of backgrounds and experiences can have a positive effect on students' learning outcomes, civic engagement, and workforce development.¹⁰⁹ In other words, peer effects result in graduates who are better prepared to engage with diverse perspectives, have developed critical thinking skills, and are ready to contribute to their local, national, and global communities through work, service, and civic engagement, all of which furthers the cause of advancing human progress and improving the social welfare.

58. Defendants' admissions and enrollment strategies are designed to maximize the potential for these positive peer effects. For example, Notre Dame explains that it looks for "creative intellectuals, passionate people with multiple interests" who may be "[w]orld-class pianists," "[w]ell-rounded senior class leaders," and "[d]edicated artists."¹¹⁰ Similarly, MIT likens its admissions to "choosing a 1,100-person team to climb a very interesting, fairly rugged mountain—together," and states that it is "emphatically *not* looking for a batch of identical perfect climbers," but instead wants "a richly varied team of capable

¹⁰⁷ Sacerdote, Bruce, "Peer Effects with Random Assignment: Results for Dartmouth Roommates," *The Quarterly Journal of Economics*, Vol. 116, No. 2, May 2001, pp. 694-697.

¹⁰⁸ Kremer, Levy, "Peer Effects and Alcohol Use Among College Students," *Journal of Economic Perspectives*, Vol. 22, No. 3, 2008, pp. 191-193, 197-202.

¹⁰⁹ Bowen, William G. and Derek Bok, *The Shape of the River*, 1 Ed., Princeton University Press, 1998. *See, also*, "Grutter v. Bollinger: Brief of the American Educational Research Association, the Association of American Colleges and Universities, and the American Association for Higher Education as Amici Curiae in Support of Respondents," Supreme Court Insight, 2003, available at <https://blackfreedom.proquest.com/wp-content/uploads/2020/09/grutter69.pdf>, accessed August 4, 2024. *See also* "Information on Admissions Lawsuits," University of Michigan, September 5, 2012, available at https://diversity.umich.edu/admissions/legal/gra_amicus-ussc/um.html, accessed July 28, 2024.

¹¹⁰ "Evaluation Criteria," University of Notre Dame, available at <https://admissions.nd.edu/apply/evaluation-criteria/>, accessed July 6, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

people who will support, surprise, and inspire each other” and who exhibit “a wide range of individual gifts, talents, interests, and achievements.”¹¹¹

59. Defendants are not alone in this focus on the composition of their incoming class.¹¹² A 2003 College Board study of over 100 schools’ admissions processes identified more than 100 factors that schools evaluate in their review of an individual applicant, including academic achievement indicators (e.g., honors courses, grades), geographic considerations (e.g., whether a student is from an economically disadvantaged region, from the local community), demographic characteristics (e.g., military veteran, first generation student), extracurricular activities (e.g., community service, work experience), and personal characteristics (e.g., creativity, concern for others), as admissions officers look to build a class of students that reflects the breadth of these factors.¹¹³ In other words, schools throughout higher education work to build well-rounded classes of students from every walk of life, seeking not to maximize revenue, but instead to maximize the positive impact of the education they provide.

60. In addition to building a well-balanced and diverse class of qualified applicants, Defendants and their peers may prefer applicants most aligned with their missions, i.e.,

¹¹¹ “Preparing for MIT,” Massachusetts Institute of Technology, available at <https://mitadmissions.org/apply/prepare/be-yourself/>, accessed July 6, 2024.

¹¹² For example, Caltech admissions officers look for a “[c]ollaborative spirit” in applicants, indicating that prospective students won’t thrive at Caltech if they “expect to be able to go it alone all the time.” “What We Look For,” California Institute of Technology, available at <https://www.admissions.caltech.edu/apply/what-we-look-for>, accessed July 25, 2024. Rice University prides itself on “a unique approach to academics” known as “collaboration over competition,” and believes that a “strongly ingrained sense of belonging at Rice” is what enables students “to explore the best aspects of their personalities and interests.” “Academics,” Rice University, available at <https://admission.rice.edu/academics>, accessed July 24, 2024.

¹¹³ Rigol, “Admissions Decision-Making Models: How U.S. Institutions of Higher Education Select Undergraduate Students,” College Board, 2003, available at <https://files.eric.ed.gov/fulltext/ED562589.pdf>, accessed August 4, 2024, pp. 1, 19, Appendix D.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

applicants who are a strong “fit” for the school. For example, Notre Dame roots its mission in Catholicism, focusing on “provid[ing] a forum where, through free inquiry and open discussion, the various lines of Catholic thought may intersect with all the forms of knowledge found in the arts, sciences, professions, and every other area of human scholarship and creativity.”¹¹⁴ MIT, meanwhile, has a particular focus on technology and science education.¹¹⁵ Cornell strives to honor its land-grant heritage.¹¹⁶ These varied missions are likely to influence specific Defendant and peer school preferences. For example, while all Defendants and their peers consider applicants with high grades and standardized test scores, Notre Dame may, all else equal, prefer an applicant who describes their Catholic identity meaningfully in their admissions materials, while MIT may prefer to admit an applicant who has succeeded in robotics competitions and has demonstrated a long-term interest in computer science, and Cornell may prefer certain applicants who come from farming families and demonstrate a commitment to advancing the lives of the broader New York community.

¹¹⁴ “Mission,” University of Notre Dame, available at <https://www.nd.edu/about/mission/>, accessed July 6, 2024 (“The University of Notre Dame is a Catholic academic community of higher learning, animated from its origins by the Congregation of Holy Cross. The University is dedicated to the pursuit and sharing of truth for its own sake. As a Catholic university, one of its distinctive goals is to provide a forum where, through free inquiry and open discussion, the various lines of Catholic thought may intersect with all the forms of knowledge found in the arts, sciences, professions, and every other area of human scholarship and creativity.”).

¹¹⁵ “Mission Statement,” Massachusetts Institute of Technology, available at <https://www.mit.edu/about/mission-statement/>, accessed July 6, 2024 (MIT’s mission is to “advance knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world in the 21st century.”).

¹¹⁶ “University Mission,” Cornell University available at <https://www.cornell.edu/about/mission.cfm>, accessed July 8, 2024 (“Cornell is a private, Ivy League university and the land-grant university for New York state. Cornell’s mission is to discover, preserve and disseminate knowledge, to educate the next generation of global citizens, and to promote a culture of broad inquiry throughout and beyond the Cornell community.”); *see also* “Land-Grant Mission,” Cornell University College of Agriculture and Life Sciences, available at <https://cals.cornell.edu/land-grant>, accessed August 3, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

61. In sum, Defendants and their peers strive to admit a balanced and diverse class of exceptional students who are capable, motivated, a fit with the institution, and able to enrich the experience of those around them—not necessarily the students most capable of generating revenue in the short or long run. Defendants compose their student bodies this way because they are dedicated to advancing their public service missions through equitable access to education, and their students benefit from peer effects that improve their educational experiences as a result.

C. Defendants and Their Peers Aim to Increase Access to Education through a Variety of Initiatives, Including Need-Based Financial Aid

62. Defendants and their peers have developed and continue to improve upon a variety of admissions and financial aid initiatives and policies that focus on increasing access for highly qualified applicants in order to meet their missions and goals to serve students and society through education, research, and public service. They do not approach their activities with a venture capital fund's strategy that seeks to find "one 'winner' out of many investments made out of a single fund to more than compensate the investors in the fund for risking their capital."¹¹⁷
63. In the subsections that follow, I discuss six such initiatives and policies aimed to support students in each of the application, admissions, matriculation, and attendance phases: (1) targeted outreach to highly qualified, low-income students that encourages applications; (2) holistic application reviews that seek to contextualize students' opportunities and circumstances; (3) need-blind admissions policies that remove

¹¹⁷ Mora Report, ¶ 73.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

consideration of financial need from application review; (4) prioritization of need-based aid that removes financial barriers for highly qualified students to matriculate; (5) simplification of communications related to financial aid that helps assuage fears about affording school; and (6) on-campus support that assists low-income students throughout their time in school.

64. In many cases, these efforts benefit low-income students and help increase socioeconomic diversity in schools' student bodies. As I describe in the following subsections, research, including my own, has demonstrated that low-income students face considerable challenges in applying to and enrolling at schools like Defendants and their peers and that these initiatives and policies have positive effects on low-income student enrollment, persistence (i.e., whether students return each year to make progress towards completion), degree completion, and post-graduation success. Defendants have made progress towards their goal of attracting a range of applicant profiles and improving social mobility for their students. For example:

- Researchers use the federal government's Pell Grant program as an imperfect proxy for the prevalence of low-income students in higher education.¹¹⁸ On average across Defendants, the share of Pell Grant recipients increased from 11.5 percent in 2007-2008 to 16.9 percent in 2021-2022. The share at Cornell rose from 12.0 percent to 19.0 percent, and the share at Notre Dame rose from 8.0 percent to 15.0 percent.¹¹⁹

¹¹⁸ The Pell Grant program provides federal need-based grant aid for undergraduate students with "exceptional financial need." The share of Pell Grant recipients is an imperfect proxy for schools' treatment of low-income students because it is dependent on the school's program offerings, the characteristics of the applicant pool, and the eligibility rules for the program. See "Federal Pell Grant Program," U.S. Department of Education, available at <https://www2.ed.gov/programs/fpg/index.html>, accessed July 23, 2024; Long, Bridget T., "The New Financial Aid Policies: Their Impact on Access and Equity for Low-Income Students?," in *Diversity in American Higher Education: Toward a More Comprehensive Approach*, Routledge, 2011, edited by Stulberg, Lisa M. and Sharon L. Weinberg, p. 232.

¹¹⁹ Backup materials to this report (IPEDS, Composition of Aid); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- The share of first-generation college students among federally-aided students has also increased on average at Defendant schools, from 14.3 percent in 1996-1998 to 17.2 percent in 2015-2017. At Georgetown, the share rose from 12.5 percent to 16.1 percent, and the share at MIT rose from 14.8 percent to 25.9 percent.¹²⁰
- Between 2009 and 2023, Defendants' social mobility rankings, based on the Washington Monthly's rankings, have improved: Cornell rose from a ranking of 113 to 35, Georgetown rose from a ranking of 107 to 11, MIT rose from a ranking of 196 to 3, Notre Dame rose from a ranking of 96 to 39, and Penn rose from a ranking of 127 to 2.¹²¹

65. Ultimately, these admissions and financial aid initiatives and policies reduce the potential revenues Defendants and their peers receive from students in the form of tuition, fees, and room and board, while increasing their outlay of expenditures per student. However, these initiatives and policies are essential to each school's educational and societal missions and thus reflect the distinctive priorities of non-profit schools, especially in contrast to for-profit schools and companies.

1. Defendants and Their Peers Actively Seek Out High-Achieving, Low-Income Students to Encourage Them to Apply

66. One initiative by Defendants and their peers to increase access is targeted outreach to encourage prospective students from disadvantaged backgrounds to apply. Defendants and their peers have used multiple strategies to target outreach to low-income students through their high schools and community-based organizations to encourage a broad range of

¹²⁰ Backup materials to this report (Scorecard); "Download the Data," U.S. Department of Education College Scorecard, available at <https://collegescorecard.ed.gov/data/>, accessed July 25, 2024.

¹²¹ Washington Monthly puts out a yearly college guide and rankings of four-year schools "based on their contribution to the public good in three broad categories: social mobility, research, and providing opportunities for public service." "Rankings," Washington Monthly, 2009, available at https://web.archive.org/web/20090905062010/http://www.washingtonmonthly.com/college_guide/rankings/national_university_rank.php, accessed July 26, 2024; "2023 National University Rankings," Washington Monthly, available at <https://washingtonmonthly.com/2023-college-guide/national-1/>, accessed July 26, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

prospective students to apply and to demystify the application and financial aid processes.¹²²

67. Some Defendants, such as Georgetown and Penn, target their outreach to low-income students who may be a good fit for their schools by paying to access the College Board's Student Search Service ("SSS").¹²³ Through the SSS, applicants may choose to share information such as their name, standardized test score ranges, colleges of interest, and other background information.¹²⁴ Schools with access to SSS can then target their outreach to students with sufficient levels of academic achievement who are specifically interested in their institution, and schools may tailor their outreach with resources specifically relevant to different types of students, such as by providing more financial aid information to low-income students.¹²⁵ Schools' active outreach using the SSS has increased rates of

¹²² See, for example, Deposition of Eric Furda, former Dean of Admissions at University of Pennsylvania, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 November 16, 2023 ("November 2023 Furda Deposition"), 51:21-54:22 (describing partnerships with community organization leaders and students to make the college search process more accessible); Deposition of David Phillips, Vice Provost for Admissions and Financial Aid at Johns Hopkins University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 January 8, 2024 ("Phillips Deposition"), 252:10-253:14 (describing strategies for recruiting, including prioritizing certain geographic areas, hosting financial aid sessions, and partnering with community-based organizations to identify high-achieving, low-income students); CORNELL_LIT0000247939 ("Socioeconomic Diversity Among Cornell Undergraduates," Cornell University, February 1, 2016) at 951-953 (discussing a variety of partnerships with local organizations and programs, research projects, application fee waivers, recruiting travel and workshops, and financial aid communication plans).

¹²³ The College Board is a non-profit organization dedicated to promoting excellence and equity in education. "About Us," CollegeBoard, available at <https://about.collegeboard.org/>, accessed August 25, 2023. "Match with Colleges and Scholarships," BigFuture, available at <https://bigfuture.collegeboard.org/student-search-service>, accessed July 7, 2024.

¹²⁴ "Student Search Service: What Information Is Shared," BigFuture, available at <https://bigfuture.collegeboard.org/student-search-service/what-information-shared>, accessed July 7, 2024.

¹²⁵ In 2013, the College Board introduced a specific low-income filter to the search capabilities for SSS. BROWN_0000274352 ("Pre-Read for Outreach Initiatives and Recruitment of Students from Low-Income Backgrounds," Brown University, May 30-June 1, 2013). For examples of Defendants' use of SSS, see GTWNU_0000057765 ("PSAT/Student Search 2019 Overview," Georgetown University, 2019); CORNELL_LIT0000020942 ("Admissions and Enrollment Statement on PeopleSoft Student Recruiting and Guiding Principles and Guidelines," Cornell University, 2007) at 944; PENN568-LIT-00032373 ("College Board's Student Search Letter," University of Pennsylvania, February 2008); "Admissions Dean Eric Furda," University of Pennsylvania Almanac, October 28, 2008, available at https://almanac.upenn.edu/archive/volumes/v55/n10/council_ef.html, accessed August 1, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

application, admissions, and enrollment for qualified low-income and first-generation students twice as much as for the average student.¹²⁶

68. To recruit lower-income students, Defendants and their peers also partner with community-based and other non-profit organizations that focus on college access for students from underrepresented backgrounds, such as the Coalition Application, the Cristo Rey Network, KIPP, and QuestBridge.¹²⁷ These organizations encourage and provide support to students who are highly qualified but may not have other support or resources to apply to college. These programs have helped to create a pipeline of applications from disadvantaged communities to Defendants and their peers; they also often provide ongoing support to students after they matriculate to improve their chances of graduating. For example:

- Coalition Application is an online standardized application that is accepted by over 170 schools, including Defendants such as Caltech, Chicago, Columbia, Duke, Emory, Johns Hopkins, Northwestern, Notre Dame, Penn, Rice, Vanderbilt, and Yale.¹²⁸ Coalition Application is focused on making higher education more accessible to historically under-represented groups and its member schools must meet strict criteria regarding tuition costs, need-based financial aid, and graduation rates.¹²⁹

¹²⁶ Smith, Jonathan et al., “The Impact of College Outreach on High Schoolers’ College Choices: Results from Over One Thousand Natural Experiments,” The College Board, November 2020, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3463241, accessed July 7, 2024, p. 105.

¹²⁷ “Member Schools,” Coalition for College, available at <https://www.coalitionforcollegeaccess.org/our-members>, accessed February 12, 2024; “Summer College Immersion Program,” Georgetown University, available at <https://summer.georgetown.edu/summer-college-immersion>, accessed July 7, 2024; “KIPP College Partnerships,” KIPP, available at <https://www.kipp.org/approach/kipp-forward/college-partnerships/>, accessed March 4, 2024; “College Partners,” QuestBridge, available at <https://www.questbridge.org/college-partners>, accessed August 6, 2024.

¹²⁸ “Member Schools,” Coalition for College, available at <https://www.coalitionforcollegeaccess.org/our-members>, accessed February 12, 2024.

¹²⁹ These standards include having at least ten percent of enrolled students as under-represented or Pell eligible, Title IV debt less than \$30,000 and a loan default rate of ten percent or less, and an overall graduation rate of at least 60 percent or under-represented or Pell eligible graduation rate of at least 50 percent. “Eligibility Criteria for Members,” Coalition for College, available at <https://www.coalitionforcollegeaccess.org/eligibility-criteria>, accessed February 23, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Cristo Rey is a network of Catholic high schools that combine academic coursework with job experience for “students with limited economic resources.”¹³⁰ Georgetown and Notre Dame partner with Cristo Rey.¹³¹ For example, rising seniors at Cristo Rey schools are eligible to participate in Georgetown’s Summer College Immersion Program, a three-week college prep course that provides students with an introduction to college life.¹³²
- KIPP is a network of open-enrollment public charter schools, from elementary to high school, in low-income communities throughout the U.S.¹³³ KIPP partnerships, including partnerships with Defendants such as Duke, Brown, Georgetown, Penn, and Vanderbilt, are executed through various levels of commitment from partner schools.¹³⁴ For example, Duke established its partnership in 2012, agreeing to actively recruit 8-12 students from KIPP schools each year and provide them with financial aid and other support services.¹³⁵ Georgetown partners with KIPP to host a three-week college preparatory summer program.¹³⁶

¹³⁰ “Mission + History,” Cristo Rey Network, available at <https://www.cristoreynetwork.org/about/mission-history>, accessed August 4, 2024.

¹³¹ “Cristo Rey University Partners,” Cristo Rey Miami High School, available at <https://www.cristoreymiami.org/admissions/cristo-rey-university-partners>, accessed August 5, 2024.

¹³² “Summer College Immersion Program,” Georgetown University, available at <https://summer.georgetown.edu/summer-college-immersion>, accessed July 7, 2024.

¹³³ “KIPP College Partnerships,” KIPP, available at <https://www.kipp.org/approach/kipp-forward/college-partnerships/>, accessed March 4, 2024; “What is the KIPP Network,” KIPP Public Schools Network, available at <https://www.kipp.org/about/network/>, accessed August 1, 2024.

¹³⁴ “Davidson College and Duke University Partner with KIPP Schools to Promote College Completion,” Davidson College, June 27, 2012, available at <https://www.davidson.edu/news/2012/06/27/davidson-college-and-duke-university-partner-kipp-schools-promote-college-completion>, accessed March 4, 2024; “Brown Partners with KIPP,” News from Brown, November 13, 2012, available at <https://news.brown.edu/articles/2012/11/brown-partners-kipp>, accessed March 4, 2024; Deposition of Eric Furda, former Dean of Admissions at University of Pennsylvania, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 March 26, 2024 (“March 2024 Furda Deposition”), 89:22-90:12 (Q. And after identifying [Pell eligible] students, how does that relate to increasing their enrollment at Penn? A. [...] So as I spoke about in my former deposition or my prior deposition, Penn admissions was reaching out to candidates through community-based organizations, through organizations that work with high-ability, lower-income students, like QuestBridge, Posse, and KIPP. So the first part is really that outreach.”); “Penn Knowledge is Power Program (PennKIPP),” University of Pennsylvania Vice Provost for Student Engagement, available at <https://vpse.upenn.edu/pennkipp/>, accessed August 3, 2024; “Vanderbilt College Access and Affordability,” Vanderbilt University, available at <https://www.vanderbilt.edu/federal-relations/vanderbilt-college-access/>, accessed July 7, 2024.

¹³⁵ “Davidson College and Duke University Partner with KIPP Schools to Promote College Completion,” Davidson College, June 27, 2012, available at <https://www.davidson.edu/news/2012/06/27/davidson-college-and-duke-university-partner-kipp-schools-promote-college-completion>, accessed March 4, 2024.

¹³⁶ “Summer College Immersion Program,” Georgetown University, available at <https://summer.georgetown.edu/summer-college-immersion>, accessed July 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- QuestBridge is a non-profit organization that connects low-income, high-achieving students with partner schools through its National College Match program. Qualified students are considered for early admissions and a full four-year scholarship at selective U.S. schools.¹³⁷ Defendants such as Brown, Caltech, Chicago, Columbia, Cornell, Dartmouth, Duke, Emory, Johns Hopkins, MIT, Northwestern, Notre Dame, Penn, Rice, Vanderbilt, and Yale partner with QuestBridge.¹³⁸

69. Defendants' and their peers' practices for recruiting low-income students are essential to advance the cause of increasing access to education for low-income students and thereby increasing socioeconomic diversity in these schools' applicant pools and consequently their student bodies. These practices do not maximize revenue for Defendants and their peers, and instead support their core missions of advancing knowledge and providing excellent educational opportunities for students from every walk of life.

2. Holistic Admissions Review Approaches Seek to Fairly Evaluate and Not Disadvantage Students from Wide-Ranging Backgrounds

70. Defendants and their peers each perform holistic admissions reviews to evaluate students fairly who come from different backgrounds by contextualizing their opportunities, experiences, and achievements.¹³⁹ A holistic approach to admissions is necessary to

¹³⁷ "National College Match," QuestBridge, available at <https://www.questbridge.org/high-school-students/national-college-match#scholarship>, accessed August 4, 2024.

¹³⁸ "College Partners," QuestBridge, available at <https://www.questbridge.org/college-partners>, accessed August 6, 2024; "Who Provides the Match Scholarship and Financial Aid?," QuestBridge, available at <https://questbridge.zendesk.com/hc/en-us/articles/218778817-Who-provides-the-Match-Scholarships-and-financial-aid>, accessed December 7, 2023.

¹³⁹ See, for example, JHULIT_0000001992 ("Email with subject line 'Re: The Realignment/Recruitment from rural areas'," November 2, 2021) ("We have had to train staff to better understand what achievement looks like for students from under resourced backgrounds. For example, it is common for students to have to work to help support their family so you may not see the same level of involvement in clubs or organizations. But working to help your family is a significant indicator of engagement and being an active community member"); MITLIT-000012010 ("Email with subject line 'Re: Update Requested for FY23 Budget'," October 18, 2021) at 013 ("Race, ethnicity, gender, socioeconomic and other factors are considered – not mechanically, but holistically – in order to understand the context in which a student has lived so that we can more fairly evaluate their achievements.").

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

effectively compare applicants, given the differences in students' backgrounds, high schools, and experiences. It would be easier to rely solely on common measures of academic achievement, such as test scores, but Defendants and their peers instead invest time and money to perform in-depth, nuanced application reviews in an effort to credit how students manage their personal circumstances and what accomplishments they demonstrate relative to what is available to them. This holistic review is a strong signal of Defendants' and their peers' commitments to increasing access for students across a range of backgrounds, including a range of socioeconomic backgrounds.

71. With holistic review, admissions officers review applicants on an individual basis, taking into consideration the circumstances of each student. For example, without holistic review, a review of applications might treat two students who failed to take advanced placement ("AP") courses the same way, even if one student attended a high school where they had the opportunity to take them and the other did not have AP courses available to them. In a holistic review of applications, on the other hand, admissions officers assess a student's engagement in his or her curriculum and account for the fact that some students have a curriculum that is limited due to a lack of resources.¹⁴⁰ Similarly, a non-holistic review of applications might treat two students with limited extracurricular activities on their resume the same way, while a holistic review would prompt admissions officers to distinguish between a student whose lack of extracurricular activities was because of family demands,

¹⁴⁰ See, for example, CALTECH000000606 ("Understanding Holistic Review in Higher Education Admissions," CollegeBoard, November 2018), at 617 ("Moreover, background qualifications and personal information also aren't considered in isolation. For example, a student who took one AP course at his or her elite, urban high school with dozens of AP options might well be considered differently than a student who took the only AP class available at his or her rural or under-resourced school [. . .]."); GTWNU_0000037560 ("Overview of Admissions and the Alumni Admissions Program (AAP)," Georgetown University, 2020) at 577 ("[W]e consider each applicant [] in the context of their high school. So, if their school doesn't offer AP classes, we do not expect them to have the opportunity to take AP classes.").

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

such as working to support their family or care for younger siblings, in contrast with a student who lacked extracurricular activities but did not have competing familial demands.¹⁴¹

72. The holistic approach of having admissions officers consider the entirety of an application in the context of a student's circumstances is essential for admitting and enrolling a broad array of high-achieving applicants who may demonstrate their talents and accomplishments in a range of ways. Focusing on the ability of the applicant to make the most of their circumstances allows Defendants and their peers to craft a well-rounded, diverse student body, consistent with each of their educational and societal missions to increase access to education and maximize the educational experience of their students.

*3. Need-Blind Admissions Policies Seek to Admit and Recruit Students
Without Disadvantaging Those Without the Ability to Pay*

73. Need-blind admissions policies are another tool Defendants and their peers use to increase access and ensure that highly qualified applicants can afford to enroll at their schools. Need-blind admissions seek to limit bias in the admissions process by ensuring that when evaluating a candidate for admission, admissions officers do not consider the potential adverse impact the candidate's enrollment might have on the school's budget. This both reduces bias in the admissions process and can be used as a public signal to encourage applications from low-income students. A school's commitment to need-blind admissions is touted as a demonstration of the school's commitment to being accessible and equitable

¹⁴¹ Deposition of John McLaughlin, former Vice Dean and Director of Admissions at University of Pennsylvania, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 July 12, 2023 ("McLaughlin Deposition"), 241:10-242:8; March 2024 Furda Deposition, 86:11-87:25; "High School Preparation," University of Pennsylvania Admissions, available at <https://admissions.upenn.edu/how-to-apply/what-penn-looks-for/high-school-preparation>, accessed May 1, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

to high-achieving low-income students. As a faculty member, university administrator, and active participant in broader conversations about college access with education and community-based organizations, I have seen and heard repeatedly how explaining the use of need-blind admissions at certain schools can assuage the fears of low-income applicants who are worried about being penalized for needing financial aid. Coupled with an institutional commitment to meet a student's full need (see **Section II.A.2**), potential applicants have shown greater interest in applying to schools like Defendants and their peers given the reassurance that their ability to pay will not affect their chances of being accepted, and that there will be support available to enable them to attend the school.

74. Need-blind admissions policies were first adopted by some higher education institutions in the 1950s in an effort to ensure that “admissions decisions would be made without regard to an applicant’s ability to pay” the listed COA.¹⁴² Historically, Defendants have described their need-blind admissions policies as being aimed at increasing access, consistent with their missions. For example, an MIT press release from 1992 described its need-blind admissions policy as “eliminat[ing] from the admissions process any consideration of an applicant’s ability to pay.”¹⁴³ Penn explained in 1999 that it adopted need-blind admissions

¹⁴² Roth, Andrew, “Admission, Ethics & Financial Aid: Formulating and Applying an Ethical Framework to the Need-Blind Debate,” in *The Journal of College Admission Ethics Series*, Alexandria, Virginia, National Association for College Admission Counseling, 2000, edited by Loveland, Elaina C. and Joyce Raynor, p. 70.

¹⁴³ “MIT Need-Based Aid Dates Back to 1867,” MIT News, 1992, available at <https://news.mit.edu/1992/aid-0506>, accessed April 29, 2024. This definition from the 1992 MIT news article is reiterated in MIT’s deposition testimony and other Defendant testimony available in this matter. For example, Stuart Schmill, Dean of Admissions and Student Financial Services at MIT, testified that need-blind means “an applicant’s ability to pay is not a factor in the admission review.” Deposition of Stuart Schmill, Dean of Admissions and Student Financial Services at Massachusetts Institute of Technology, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 June 28, 2023 (“Schmill Deposition”), 29:13-16; *see also* Deposition of David Dukor-Jackson, Director of Admissions at Massachusetts Institute of Technology, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 May 9, 2022 (“Dukor-Jackson Deposition”), 67:5-21. As another example, Eric Furda, former Dean of Admissions at Penn, testified that need-blind means “not taking into consideration a family’s ability to pay to inform the admission decision.” November 2023 Furda Deposition, 126:4-9.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

policies in 1965 and that being need-blind “meant that Penn would accept a candidate by examination of his or her high-school record, resume, and qualifying statistics without regard to the financial situation of the applicant. This would ensure a fair assessment without consideration of ability to pay college costs.”¹⁴⁴ Georgetown has followed a need-blind admissions policy since at least 1978, under which “every student is considered for admissions solely on merit,” not “ability to pay.”¹⁴⁵

75. Despite the recognition that need-blind admissions policies help encourage low-income students to apply and reduce bias against low-income students in the admissions process, Defendants are among the relatively few schools that choose to implement need-blind admissions policies. Of the approximately 2,300 four-year schools in the U.S.,¹⁴⁶ only a little more than about 100 had need-blind admissions policies as of 2022.¹⁴⁷ The number of schools that have need-blind admissions policies is constrained by the expectation that such schools also make a strong effort to meet the financial needs of the students they admit. As a result, the number of need-blind schools has fluctuated over time, as some schools decided to move away from need-blind policies due to financial challenges.¹⁴⁸

¹⁴⁴ “Images in Flux: The 20th Century Development of the Undergraduate Experience at Penn,” University of Pennsylvania, 1999, available at <https://archives.upenn.edu/exhibits/penn-history/images-in-flux/part-8/>, accessed July 7, 2024.

¹⁴⁵ GTWNU_0000327371 (“Georgetown University Staff for the 1789 Scholarship Imperative Volunteer Pilot Program,” Georgetown University, May 2010) at 392.

¹⁴⁶ National Center for Education Statistics, *Acceptance rates; number of applications, admissions, and enrollees; and enrollees’ SAT and ACT scores for degree-granting postsecondary institutions with first-year undergraduates, by control and level of institution: Academic year 2022-23*, available at https://nces.ed.gov/programs/digest/d23/tables/dt23_305.40.asp.

¹⁴⁷ Robinson, Ashley, “All 115 Need-Blind Colleges in the US: A Complete Guide,” PrepScholar, 2020, available at <https://blog.prepscholar.com/need-blind-colleges-list>, accessed July 7, 2024.

¹⁴⁸ *See, for example*, Roth, Michael, “Sustainable Affordability,” Wesleyan University, May 30, 2012, available at <https://roth.blogs.wesleyan.edu/2012/05/30/sustainable-affordability/>, accessed August 4, 2024; “Macalester Today Spring 2005,” Macalester College, April 1, 2005, available at <https://digitalcommons.macalester.edu/macalestertoday/82/>, accessed August 4, 2024, p.4.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

76. Notwithstanding the customary understanding of the term “need-blind admissions” in the higher education industry, I understand that Plaintiffs have argued that that the term in Section 568 means that any awareness or consideration of a student’s or family’s socioeconomic status during the admissions process negates a school’s need-blind admissions policy.¹⁴⁹ That is, Plaintiffs suggest that information admissions officers may learn while performing holistic application review—including information about the student’s context, background, and life experiences—is sufficient to render that school not need-blind.
77. To the contrary, based on my experience and knowledge of general industry practice, to consider an applicant “without regard to financial circumstances” is generally understood to mean that an applicant will not be disadvantaged in the admissions process due to their potential need for financial aid.¹⁵⁰ The deposition testimony in this case reflects the same understanding: that conducting review “without regard to financial circumstances” means without considering whether an applicant’s detailed financial information (such as the information supplied in financial aid applications) indicates that they might qualify for financial aid, not without awareness of any general information that may be suggestive of socioeconomic status.¹⁵¹ This is consistent with need-blind schools’ external messaging

¹⁴⁹ The 568 Exemption defines “on a need-blind basis” to mean “without regard to the financial circumstances of the student involved or the student’s family.” Improving America’s Schools Act of 1994, § 568, 15 U.S.C. § 1.

¹⁵⁰ *See, for example*, Shaffer, Suzanne, “Need-Blind Colleges & Need-Blind Admissions,” appily, available at <https://www.appily.com/guidance/articles/finding-your-college/need-blind-admission-colleges>, accessed August 4, 2024 (“A college or university that claims to have a need-blind admission policy communicates that your ability to pay for your education will not be considered when offering admission. It does not mean they will meet 100% of your financial need, but they won’t deny you admission because you can’t afford to pay. In other words, you will be admitted or rejected solely on the merit of your application—not on your ability or inability to pay.”).

¹⁵¹ For example, Scott Wallace-Juedes, former Director of Undergraduate Financial Aid at Yale testified need-blind means “admissions decisions are made absent information – financial information that’s submitted to the financial aid office about a family’s ability to contribute.” Deposition of Scott Wallace-Juedes, former Director of

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

about their financial aid policies,¹⁵² as well as Congress's description of financial circumstances as information "that is derived from such student's financial aid application form, or from any other document or record obtained for the purpose of ascertaining such financial circumstances."¹⁵³

78. The use of need-blind admissions policies works hand in hand with the holistic application review process to reduce bias against low-income students in admissions, to convert low-income applicants into low-income admitted students, and to increase equity of access to education.

Undergraduate Financial Aid at Yale University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 July 7, 2023 ("Wallace-Juedes Deposition"), 162:5-9. In another example, Shane Maloney, Associate Director for Federal Awards in the Office of Student Financial Aid at University of Wisconsin-Madison, testified that the university has practiced need-blind admissions for many years with the understanding that "admissions makes [...] decisions independent of need information from the FAFSA." Deposition of Shane Maloney, Associate Director of Federal Awards at University of Wisconsin-Madison, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 March 26, 2024 ("Maloney Deposition"), 119:21-120:13. Similarly, Eric Furda, a former Director of Admissions at Columbia, explained that Columbia's need-blind admissions policy meant admissions "did not get information from the financial aid office while we were admitting the class to Columbia College and the School of Engineering and Applied Science." November 2023 Furda Deposition, 25:18-26:8. John DeGioia, President of Georgetown, also testified that "[t]he term on a need-blind basis means without regard to the financial circumstances of the student [...]. The way that has been typically understood in the higher education community is when we evaluate your potential candidacy, we don't regard your financial capacity, your ability to pay as a relevant factor in our decision to admit you." Deposition of John DeGioia, President of Georgetown University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 February 16, 2024 ("DeGioia Deposition"), 172:18-173:4.

¹⁵² For example, in a 1999 edition of Penn's publicly available *Almanac*, Penn's former Director of Financial Aid, Bill Schilling, explained that need-blind admissions "means that when the admissions office is evaluating students, when the selection committees are making their decisions, they are not making them based on whether the student is an aid applicant or not" and that it is the "financial aid application" that "provides information about the family's financial circumstances." "Need-Blind Admissions and the Drive to Increase Endowed Scholarships," University of Pennsylvania Almanac, 1999, available at <https://almanac.upenn.edu/archive/v46/n11/fin-aid.html>, accessed April 29, 2024. Similarly, since at least 2019, Harvard's website has stated that the university admits students "regardless of their financial circumstances," which means that "your financial need and your aid application will never affect your chance of being admitted to Harvard." "How Aid Works," Harvard College, available at <https://college.harvard.edu/financial-aid/how-aid-works>, accessed July 25, 2024.

¹⁵³ House Conference Report No. 103-761 (1994), p. 912.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

4. Defendants and Their Peers Prioritize Need-Based Financial Aid over Merit-Based Aid

79. Financial aid is a tool that Defendants and their peers use to increase access among qualified applicants by ensuring that admitted students can afford to attend the school of their choice. Schools may award institutional financial aid to a student based on the student's level of demonstrated financial need ("need-based aid") or based on other factors such as athletic or academic achievement ("non-need-based aid" or "merit-based aid"). While both forms of aid benefit students by reducing the price of attendance, need-based aid is more focused on distributing aid equitably among students according to their need, as dollars are allocated according to financial circumstances, with more aid offered to students with more need. Each Defendant prioritizes need-based financial aid, as do other members of the 568 Group and their peer schools, and this choice reflects each of these schools' missions of increasing access for admitted students, especially low- and middle-income students, through the use of institutional resources.

a) Need-Based Financial Aid

80. The principle that aid should be awarded on the basis of need is deeply rooted in higher education and many other social programs.¹⁵⁴ For example, Harvard's first financial aid scholarship was established in 1643 specifically for "the maintenance of some poor

¹⁵⁴ CBD000001 ("2003-2004 School Year IM Users' Guide," The College Board, 2003) at 022 ("Since the founding of postsecondary educational institutions in this country, there has existed a tradition that scholarships and other forms of financial support should be provided for students who are 'in need.'").

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

[scholar],”¹⁵⁵ while MIT established its first need-based scholarship in 1867, two years after classes began.¹⁵⁶

81. The process of awarding financial aid based on a need calculation mirrors decades of federal and state policy in distributing government benefits. There is a long history of the U.S. government implementing “means-tested” programs that determine an individual’s eligibility for benefits based on an assessment of their financial circumstances and needs. For example, programs like the National School Lunch Program,¹⁵⁷ Temporary Assistance for Needy Families (“TANF”),¹⁵⁸ and Supplemental Nutrition Assistance Program (“SNAP”),¹⁵⁹ determine benefit eligibility and amounts according to income thresholds adjusted by family size, a proxy for financial circumstances. Similarly, for over 50 years, the Pell Grant program has been the federal government’s primary benefit program for low-income students attending college; award eligibility and amount is based on an evaluation of family financial information provided on the Free Application for Federal Student Aid (“FAFSA”).¹⁶⁰ The focus on determining a family’s eligibility for a benefit

¹⁵⁵ “Lady Mowlson Bequeaths the First Undergraduate Scholarship,” The Harvard Crimson, available at <https://financialaid.hcf.harvard.edu/lady-mowlson>, accessed November 30, 2023.

¹⁵⁶ “MIT Need-Based Aid Dates Back to 1867,” MIT News, 1992, available at <https://news.mit.edu/1992/aid-0506>, accessed April 29, 2024.

¹⁵⁷ Long, Cynthia, “Child Nutrition Programs: Income Eligibility Guidelines,” USDA Food and Nutrition Service, February 20, 2024, available at <https://www.federalregister.gov/documents/2024/02/20/2024-03355/child-nutrition-programs-income-eligibility-guidelines>, accessed August 1, 2024.

¹⁵⁸ “Apply for TAFDC,” Mass.gov, available at <https://www.mass.gov/how-to/apply-for-tafdc>, accessed July 26, 2024.

¹⁵⁹ “SNAP Eligibility,” USDA Food and Nutrition Service, available at <https://www.fns.usda.gov/snap/recipient/eligibility>, accessed August 5, 2024; *see also* “Massachusetts Supplemental Nutrition Assistance Program (SNAP),” SNAP, available at <https://www.benefits.gov/benefit/1280>, accessed July 8, 2024.

¹⁶⁰ “How the Federal Government Distributes Aid to Students,” Lumina Foundation & IHEP, available at <https://www.luminafoundation.org/files/resources/form-and-formula-viewing-guide.pdf>, accessed December 7, 2023, pp. 5-7; Baum, Sandy, “Exploring Ways to Enhance FAFSA Efficiency: The Federal Methodology: Is It a Good Measure of Ability to Contribute Toward Educational Expenses?,” Urban Institute and The National

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

based on their income and other measures of financial circumstance reflect a recognition that resources—whether from the government or a school—are limited, and there is a desire to ensure that these limited resources be distributed fairly and targeted to those with the greatest financial need.

82. To award need-based financial aid, schools begin by determining each student's level of demonstrated need based on the information students and their families submit via financial aid application forms. The two most common financial aid application forms are: (1) the FAFSA, which is used to award federal financial aid and is also used by certain schools to award their own need-based institutional financial aid;¹⁶¹ and (2) the College Scholarship Service PROFILE ("CSS PROFILE"), which is used by select schools to help determine additional institutional need-based aid awards.¹⁶² Some schools may also have their own individual financial aid applications, either instead of or in addition to the FAFSA and CSS PROFILE.¹⁶³ The financial information from the student and family collected on financial aid applications is then used to calculate the student's EFC.¹⁶⁴

Association of Student Financial Aid Administrators, August 2020, available at https://www.nasfaa.org/uploads/documents/FAFSA_Series_Pt10_Federal_Methodology.pdf, accessed August 21, 2023, p. 4.

¹⁶¹ "What Is the FAFSA?," CollegeBoard, June 12, 2023, available at <https://blog.collegeboard.org/what-is-the-fafsa>, accessed August 21, 2023.

¹⁶² "What Are the Different Types of Financial Aid?," BigFuture, available at <https://bigfuture.collegeboard.org/pay-for-college/get-help-paying-for-college/different-types-financial-aid>, accessed August 2, 2024.

¹⁶³ *See, for example*, "Applying for Financial Aid," University of Southern California, available at <https://financialaid.usc.edu/graduates/prospective/applying.html>, accessed August 7, 2024; "Financial Aid Forms," Boston College, available at <https://www.bc.edu/bc-web/offices/student-services/financial-aid/financial-aid-forms.html>, accessed August 22, 2023.

¹⁶⁴ "Chapter 3: Expected Family Contribution (EFC)," Federal Student Aid, available at <https://fsapartners.ed.gov/knowledge-center/fsa-handbook/2023-2024/application-and-verification-guide/ch3-expected-family-contribution-efc>, accessed December 11, 2023.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

83. The Federal Government has a set formula for making its EFC calculation using information from the FAFSA to award federal financial aid, but, to award institutional financial aid, each school may have its own specific needs assessment methodology using information from the FAFSA, CSS PROFILE, and/or other forms, to calculate a school-specific EFC. Taking the difference between each student's EFC and the school's COA gives an individualized estimate of each students' financial need, which, as described in **Section II.A.2**, each school then addresses with a financial aid package made up of institutional and/or federal grants, loans, and work study support—and at each Defendant school, this financial aid package covers admitted students' full need.
84. As I have documented in my research, while all students are concerned about the affordability of higher education, many high-income students are able to select and attend a school irrespective of whether they receive financial aid. For low-income students, however, lack of financial aid can mean not attending any post-secondary school.¹⁶⁵ Need-based financial aid, by definition, targets the specific hardship that low-income students face and helps place them on a level playing field with higher-income students. Several studies have demonstrated that need-based financial aid increases enrollment and persistence among low-income students.¹⁶⁶
85. To advance their missions, including improving the educational experience, broadening access to education, advancing equity and fairness, and increasing diversity, Defendants (and many other schools) therefore spend substantial time and effort attempting to ensure

¹⁶⁵ Long, Bridget T., "Making College Affordable by Improving Aid Policy," *Issues in Science and Technology*, Vol. 26, 2010, p. 34. All class members attended a Defendant institution, meaning the amount of aid they were awarded was sufficient for them to attend that institution.

¹⁶⁶ For a review of such research, see Dynarski, Susan et al., "Chapter 4 - College Costs, Financial Aid, and Student Decisions," Vol. 7, *Handbook of the Economics of Education*, 2023, pp. 240-244.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

that need-based financial aid reaches the neediest students and does so in a manner that is equitable and fair. Through the need analysis process, schools that award need-based financial aid seek to adhere to the principle of “vertical equity,” which is to treat families in different financial circumstances differently, and the principle of “horizontal equity,” which is to treat families in similar financial circumstances similarly.¹⁶⁷

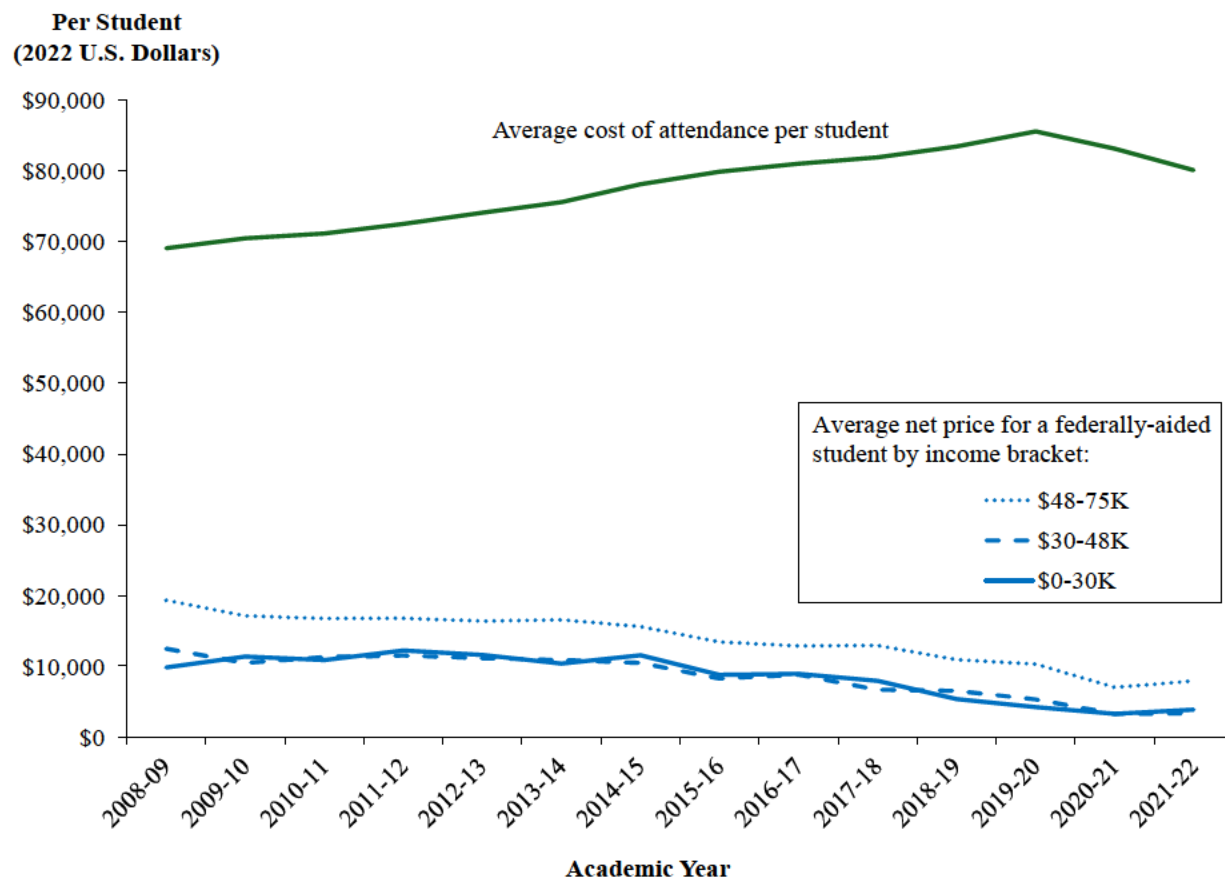
86. Analysis of IPEDS data shows that Defendants’ efforts have been successful. As shown in **Figure 5**, and as noted above in **Section II.A.2**, despite rising COA, the average net price for any student receiving aid remained constant from academic year 2008-2009 to 2021-2022. Among students receiving any form of federal aid, the average net price for students whose families were in income brackets under \$75,000 was substantially lower than the overall average net price for any aided student, and in fact decreased across Defendants. For example, federally-aided students whose families were in the \$48,000 to \$75,000 income bracket saw the average net price decrease from \$19,290 in the 2008-2009 academic year to \$7,887 in the 2021-2022 academic year.¹⁶⁸

¹⁶⁷ Baum, Sandy, “A Primer on Economics for Financial Aid Professionals,” CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, p. 8.

¹⁶⁸ Net price is adjusted for inflation to 2022 dollars using the CPI. For academic years, I apply the inflation adjustment to the year of the spring semester. For example, nominal amounts in academic year 2008-2009 are treated as 2009 dollars. Backup materials to this report (IPEDS, Net Price); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>; “Consumer Price Index for All Urban Consumers: All Items in U.S. City Average,” Federal Reserve Bank of St. Louis, June 2024, available at <https://fred.stlouisfed.org/series/CPIAUCNS>, accessed August 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Figure 5
Defendants' Average Net Price Decreased Over Time for Federally-Aided Students in Low-Income Brackets¹⁶⁹

**Notes:**

[1] A school's published cost of attendance is reported in IPEDS in the field "Total Price." IPEDS calculates this field as the sum of tuition, required fees, room and board, books and supplies, and other expenses for on-campus first year students. Average cost of attendance in a given year is calculated as the sum of cost of attendance across Defendants in a given year divided by 17, the number of Defendants.

[2] Net prices for federally-aided students for each of the income bracket shown are reported in IPEDS in the fields: "Average net price (income 0-30,000)-students awarded Title IV federal financial aid," "Average net price (income 30,001-48,000)-students awarded Title IV federal financial aid," and "Average net price (income 48,001-75,000)-students awarded Title IV federal financial aid." IPEDS calculates these fields by subtracting the average amount of aid students receive from federal, state, and local government sources, as well as institutional grant and scholarship aid from cost of attendance. These fields are available starting in the 2008-2009 academic year.

[3] Average net price and average cost of attendance are adjusted for inflation to 2022 dollars using the CPI. For academic years, I apply the inflation adjustment to the year of the spring semester. For example, nominal amounts in academic year 2008-2009 are treated as 2009 dollars.

¹⁶⁹ National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>; Backup materials to this report (IPEDS, Net Price); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>; "Consumer Price Index for All Urban Consumers: All Items in U.S. City Average," Federal Reserve Bank of St. Louis, June 2024, available at <https://fred.stlouisfed.org/series/CPIAUCNS>, accessed August 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

[4] All 17 Defendants are included for the entire period, regardless of their membership in the 568 Group. Emory's Oxford College is listed separately but does not consistently report information between 2008-2009 and 2021-2022 and is therefore excluded from this analysis.

b) Merit-Based Financial Aid

87. Unlike need-based financial aid, a student's eligibility for merit-based aid does not depend on the student's financial circumstances. Only some Defendant schools offer merit-based aid. Chicago, Duke, Emory, Johns Hopkins, Northwestern, Notre Dame, Rice, and Vanderbilt offer or have offered limited merit-based aid to students, with eligibility criteria that vary based on the specific scholarship.¹⁷⁰ For example, Notre Dame offers merit-based scholarships to less than five percent of first-year students "based on their highly competitive academic records, demonstrated leadership, and service to their communities," each with different eligibility criteria based on a "very competitive" selection process:¹⁷¹ some require the prospective student to commit to majoring in certain degrees, such as engineering, while others require the prospective student to be a resident of a specific county or country.¹⁷² Additionally, Duke, Johns Hopkins, Georgetown, Northwestern,

¹⁷⁰ "Merit Scholarships," University of Chicago, available at <https://collegeadmissions.uchicago.edu/financial-support/scholarships/merit-scholarships>, accessed July 6, 2024; "Merit Scholarships," Duke University, available at <https://ousf.duke.edu/merit-scholarships/>, accessed July 6, 2024; "Grants and Scholarships," Emory University - Office of Financial Aid, available at <https://studentaid.emory.edu/undergraduate/types/grants-scholarships/index.html>, accessed August 5, 2024; "Merit Scholarships," Johns Hopkins University, available at <https://apply.jhu.edu/tuition-aid/types-of-financial-aid/merit-scholarships/>, accessed July 6, 2024; "Admitted Student FAQs," Northwestern University, available at <https://undergradaid.northwestern.edu/apply-for-aid/prospective-students/admitted-student-faqs.html>, accessed August 5, 2024; "Athletics Compliance Office," University of Notre Dame Department of Athletics, available at <https://financialaid.nd.edu/aid-types/undergraduate-students/merit-based-scholarships/>, accessed June 27, 2024; "Merit Scholarships," Rice University, available at <https://financialaid.rice.edu/types-aid/merit-scholarships>, accessed July 6, 2024; "Merit Scholarship Opportunities," Vanderbilt University, available at <https://www.vanderbilt.edu/scholarships/faq.php>, accessed June 27, 2024.

¹⁷¹ "Funding Types," University of Notre Dame, available at <https://admissions.nd.edu/aid-affordability/funding-types/>, accessed July 26, 2024; "Notre Dame Scholars' Program," University of Notre Dame, available at <https://scholars.nd.edu/>, accessed August 3, 2024.

¹⁷² "Notre Dame Scholars' Program All Awards (A-Z)," University of Notre Dame Office of the Provost, available at <https://scholars.nd.edu/awards/list-of-awards/>, accessed August 2, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Notre Dame, Rice, and Vanderbilt also provide full or partial need-based and merit-based scholarships for student-athletes.¹⁷³

88. Although these Defendant schools offer merit-based aid, the total amount given in merit-based aid by these schools pales in comparison to what each of them gives in need-based aid.¹⁷⁴ Merit-based aid allows schools to compete for students who have particular profiles and benefits those students by lowering the price of their college experience, but it is not a well-suited mechanism to improve access, especially for students from disadvantaged backgrounds. This is because merit-based aid is not a substitute for addressing the affordability of higher education. In fact, academic research shows that need-based aid increases students' persistence in school more than similar amounts of merit-based aid.¹⁷⁵ Academic research also increasingly has demonstrated that merit-based aid is often awarded disproportionately to higher-income students. In my academic work, I have found that increases in merit-based aid in some segments of higher education has in fact decreased

¹⁷³ See **Appendix C** (Common Data Set). The Common Data Set lists Brown and Columbia as providing non-need-based institutional grant aid, nevertheless, both schools' financial policies make it clear that they do not provide merit-based aid. "Does Columbia Offer Merit Scholarships?," Columbia College, available at <https://www.cc-seas.columbia.edu/content/does-columbia-offer-merit-scholarships>, accessed July 28, 2024; "Other Grants and Scholarships," Brown University, available at <https://finaid.brown.edu/aid-types/grants-scholarships>, accessed July 28, 2024.

¹⁷⁴ For example, in 2021-2022, Duke reported \$136,570,732 in institutional need-based grant aid and \$14,331,651 in institutional non-need-based grant aid; Johns Hopkins reported \$154,724,147 in institutional need-based grant aid and \$9,632,568 in institutional non-need-based grant aid; Georgetown reported \$112,500,000 in institutional need-based grant aid and \$200,000 in institutional non-need-based grant aid; Northwestern reported \$206,932,529 in institutional need-based grant aid and \$1,825,027 in institutional non-need-based grant aid; Notre Dame reported \$186,226,618 in institutional need-based grant aid and \$9,082,891 in institutional non-need-based grant aid; Rice reported \$97,447,988.61 in institutional need-based grant aid and \$6,077,080.40 in institutional non-need-based grant aid; and Vanderbilt reported \$178,908,556 in institutional need-based grant aid and \$20,351,601 in institutional non-need-based grant aid. Common Data Set, 2021-2022. See **Appendix C** (Common Data Set).

¹⁷⁵ See, for example, Nguyen, Tuan et al., "The Effects of Grant Aid on Student Persistence and Degree Attainment: A Systematic Review and Meta-Analysis of the Causal Evidence," *Review of Educational Research*, Vol. 89, No. 6, 2019, pp. 864-865.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

access to higher education for low-income students and worsened income inequality.¹⁷⁶

For example, a study of a public merit-based aid program introduced in the 1990s in Georgia found that the program widened the existing income gap in college attendance.¹⁷⁷

These findings are also evident in publicly available data. For example, in the 2019-2020 academic year, according to a study done by the National Association for College Admission Counseling, students from the bottom income quartile received on average \$5,000 in merit-based aid while those from the top income quartile received on average \$8,820, and only 29 percent of low-income students received any merit-based aid compared to 37 percent of high-income students.¹⁷⁸

89. Higher-income students tend to be more favored the more stringent the criteria are for awarding merit-based aid. In my research, I have highlighted the fact that test scores are correlated with family income, with more affluent students scoring higher on average.¹⁷⁹ This heavily skews the awarding of merit-based aid based on test scores to higher-income students. Students from higher-income backgrounds are also likely to have higher GPAs, more honors and AP courses, and higher participation in extracurricular and leadership activities that qualify them for merit-based aid awards. By contrast, low-income students tend to have fewer opportunities to engage in those activities due to a lack of resources and

¹⁷⁶ See, for example, Long (2010), p. 35.

¹⁷⁷ Dynarski, Susan, "Hope for Whom? Financial Aid for the Middle Class and Its Impact on College Attendance," *National Tax Journal*, Vol. 53, No. 3.2, 2000.

¹⁷⁸ See Figures 1 and 4 in Heller, Don et al., "Unequal Distribution," National Association for College Admission Counseling, October 10, 2023, available at <https://admitted.nacacnet.org/wordpress/index.php/2023/10/10/unequal-distribution/>, accessed July 8, 2024..

¹⁷⁹ Long, Bridget T. and Erin Riley, "Financial Aid: A Broken Bridge to College Access?," *Harvard Educational Review*, Vol. 77, No. 1, 2007, p. 41.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

rigorous courses at their high schools, and they may need to devote time to less rewarded activities, such as needing to work to support their families.¹⁸⁰

90. In sum, prioritizing need-based aid over merit-based aid does not help Defendants and their peers increase their revenues. Defendants and their peers nevertheless do prioritize need-based aid over merit-based aid because doing so serves to distribute their finite institutional aid resources equitably in terms of need, thereby advancing their educational and societal missions.

5. Efforts to Simplify Communications of Financial Aid Policies Encourage High-Achieving, Low-Income Students to Apply

91. Another means by which some Defendants and their peers try to increase access is by simplifying communications around financial aid policies. This initiative helps increase access for low-income applicants in particular, as one of the barriers faced by these applicants is an expectation, despite need-blind admissions policies and commitments to meet full need, that they will not be able to afford to attend schools like Defendants and their peers. In practice, low-income students often pay less to attend such schools than they would to attend schools with lower published prices, due to the financial aid awards of Defendants and their peers. Given the complexity of the federal financial aid process and the fact that many low-income students lack school support or parental knowledge of how to navigate the institutional aid process, they are often unaware of how much they could

¹⁸⁰ Long and Riley (2007), p. 45. *See also, for example*, JHULIT_0000001992 (“Email with subject line ‘Re: The Realignment/Recruitment from rural areas’,” November 2, 2021) (“We have had to train staff to better understand what achievement looks like for students from under resourced backgrounds. For example, it is common for students to have to work to help support their family so you may not see the same level of involvement in clubs or organizations. But working to help your family is a significant indicator of engagement and being an active community member.”).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

receive in financial aid. Improving messaging around financial aid to bridge this knowledge gap improves access by encouraging applications from high-achieving low-income students who might otherwise assume they would not be able to afford to attend schools like Defendants and their peers. This has been a major part of my research, both diagnosing the problem and creating interventions and advocating for policies that would help low-income students better understand and access the financial aid they are eligible to receive.¹⁸¹

92. The data are clear that the net price for federally-aided low-income students at Defendants would be lower than many other schools that appear to have a lower COA. For example, in the 2021-2022 academic year, Georgetown's average COA was \$81,515, Penn's average COA was \$83,298, Vassar College's average COA was \$80,830, and UVA's average in-state COA was \$36,314 and its average out-of-state COA was \$70,696.¹⁸² However, a federally-aided student with a family household income between \$48,000 and \$75,000 would have paid an average net price of \$11,409 at Georgetown and \$11,544 at Penn in the 2021-2022 academic year.¹⁸³ By contrast, a federally-aided student with a family

¹⁸¹ See, for example, Bettinger, Eric P. et al., "The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment," *The Quarterly Journal of Economics*, Vol. 127, No. 3, 2012; Avery, Christopher et al., "Digital Messaging to Improve College Enrollment and Success," *Economics of Education Review*, Vol. 84, 2021.

¹⁸² Backup materials to this report (IPEDS, Net Price); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>. Published cost of attendance is reported in IPEDS in the field "Total Price." IPEDS calculates this field as the sum of tuition, required fees, room and board, books and supplies, and other expenses for on-campus first year students.

¹⁸³ Backup materials to this report (IPEDS, Net Price); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>. Net prices for federally-aided students with a household income between \$48,000 and \$75,000 are reported in IPEDS in the field: "Average net price (income 48,001-75,000)-students awarded Title IV federal financial aid." IPEDS calculates this fields by subtracting the average amount of aid students receive from federal, state, and local government sources, as well as institutional grant and scholarship aid from cost of attendance.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

household income between \$48,000 and \$75,000 would have paid an average net price of \$20,408 at Vassar College and \$14,884 at UVA.¹⁸⁴

93. Although many students would pay less to attend Defendant schools, many students are unaware of this given the complexity of the financial aid process. Defendants and their peers have sought to address the information gaps faced by low-income students by simplifying communications around their financial aid policies and addressing concerns specific to low-income students. For example, students often do not understand the differences in the types of financial aid (i.e., grants, which do not need to be paid back, versus loans, which need to be paid back, versus work-study, which is earned through student labor). Moreover, with little awareness about grant aid, low-income students often assume the aid they will receive will be loans. This is especially concerning in efforts to increase college access because, as I note in my research, the academic literature has documented a higher prevalence of debt aversion among low-income students.¹⁸⁵ In fact, a 2002 survey found that low-income students were more likely to report that student loan debt impacted their decision to pursue higher education or their choice of institution.¹⁸⁶ Lower levels of financial literacy also contribute to the aversion low-income students and families have to taking on any debt.¹⁸⁷

¹⁸⁴ Backup materials to this report (IPEDS, Net Price); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>.

¹⁸⁵ Long, Bridget T., "The New Financial Aid Policies: Their Impact on Access and Equity For Low-Income Students?," *Harvard Graduate School of Education*, 2010, p. 6. *See also* Long (2011).

¹⁸⁶ Baum, Sandy and Marie O'Malley, "College on Credit: How Borrowers Perceive Their Education Debt," *Journal of Student Financial Aid*, Vol. 33, No. 3, 2003. *See also* Avery, Christopher et al., "A Revealed Preference Ranking of U.S. Colleges and Universities," *The Quarterly Journal of Economics*, Vol. 128, No. 1, 2013.

¹⁸⁷ Anderson, Drew M. et al., "The State of Financial Knowledge in College: New Evidence from a National Survey," *RAND Corporation*, 2018, p. 2; Markle, Gail, "Crushing Debt or Savvy Strategy? Financial Literacy and Student Perceptions of their Student Loan Debt," *Journal of Student Financial Aid*, Vol. 49, No. 1, 2019, p. 1.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

94. In response to the growing literature on debt aversion, as shown in **Figure 6** below, since 2008, many of the Defendants have introduced no-loan policies for all undergraduate students, which eliminate loans from financial aid packages and replace them with scholarships, grants, or work-study. These blanket policies aim to increase applications from low-income students concerned about loan debt, particularly since they are simple and easy to communicate.

Figure 6
Defendants' No-Loan Policies as of 2023¹⁸⁸

Institution	Year
Columbia	2008
Yale	2008
Penn	2009
Vanderbilt	2009
Chicago	2015
Northwestern	2016
MIT	2017
Brown	2018
Johns Hopkins	2019
Dartmouth	2022
Emory	2022
Rice	2022

Notes:

[1] As of 2023, Caltech, Cornell, Duke, Georgetown, and Notre Dame do not have no-loan policies.

[2] Penn phased in their no-loan policy beginning September 2008 restricted to undergraduates with calculated family incomes under \$100,000 and extended the policy to all undergraduate students eligible for financial aid in 2009.

[3] Chicago and Northwestern implemented their policy for incoming first-year and future undergraduate students.

[4] MIT previously established a no-loan policy for all undergraduate students before 2011 but ended their policy as of the 2011-2012 academic year. MIT reinstated their no-loan policy as of the 2017-2018 academic year.

95. Similarly, some of the Defendants have instituted income threshold policies whereby prospective students with family incomes under a certain amount (and with typical amounts of assets) will not have loans in their financial aid packages or will not have a required

¹⁸⁸ Backup to this report (No-Loan Timeline); **Appendix C** (No-Loan Timeline).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

parent contribution to the cost of their education. For example, in January 2008, Cornell announced a policy that eliminated loans for families with income less than \$60,000 and assets less than \$100,000.¹⁸⁹ In 2014, Brown eliminated parent contributions for families with total parent earnings lower than \$60,000 and assets lower than \$100,000, and for families with earnings lower than \$60,000 but assets greater than \$100,000, required “a significantly reduced parent contribution (from assets only).”¹⁹⁰ In practice, many of these students would not have been expected to contribute under the schools’ existing institutional need analysis methodologies. These types of income threshold policies have been shown to be much more impactful on student interest and decisions due to their simplicity, in comparison to aid programs that emphasize EFC and other concepts embedded in the complex financial aid process and forms.¹⁹¹

96. The reduced use of loans in financial aid packaging has been shown to increase the matriculation of Pell Grant recipients.¹⁹² Thus, Defendants’ and their peers’ efforts to simplify communications reflect their commitment to encouraging low-income students to apply, as part of each of their overarching goals of increasing access.

¹⁸⁹ “Cornell Drops Need-Based Loans for Students From Families Earning Under \$75,000,” Cornell University, January 31, 2008, available at <https://news.cornell.edu/stories/2008/01/cornell-announces-sweeping-new-financial-aid-program>, accessed August 6, 2024.

¹⁹⁰ BROWN_0000050379 (“Financial Aid Office: Undergraduate Overview,” Brown University, 2014) at 379 (“Families with total parent earnings less than \$60,000 and assets greater than \$100,000 have a significantly reduced contribution (from assets only).”).

¹⁹¹ Avery, Christopher et al., “Cost Should Be No Barrier: An Evaluation of the First Year of Harvard’s Financial Aid Initiative,” *National Bureau of Economic Research Working Paper Series*, 2006. See also Deposition of Sarah Donahue, former Director of Financial Aid at Harvard University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 March 26, 2024 (“Donahue Deposition”), 30:2-10, 37:12-38:4, 116:18-117:6.

¹⁹² Bennett, Christopher “Taken for Granted? Effects of Loan-Reduction Initiatives on Student Borrowing, Admission Metrics, and Campus Diversity,” *Research in Higher Education*, 2020.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

6. Defendants and Their Peers Devote Additional Resources to Support Low-Income Students During Their College Years

97. Defendants and their peers seek to help matriculated students succeed at their schools. The higher education industry has recognized the need to provide ongoing support to low-income students once they have matriculated. Research, including my own, has increasingly demonstrated that low-income students graduate at lower rates than their high-income peers, and that support services are particularly impactful for increasing rates of persistence and graduation for this group.¹⁹³ Defendants and their peers have therefore continued to take steps to support low-income students by providing dedicated resources, such as additional financial support, counseling, and academic coaching. For example:

- Cornell established the Access Fund in 2019 to provide low-income students with up to \$500 in financial support to alleviate on-campus barriers, provide access to essential needs, and assist with unforeseen expenses not covered by financial aid.¹⁹⁴ Cornell established the CU Emergency Fund to assist students with up to \$500 in financial support per academic year to cover urgent, unanticipated expenses, with priority given to low-income students.¹⁹⁵ Cornell also launched several programs to assist low-income students facing food insecurity on campus, such as partnering with Swipe Out Hunger, a program that allocates meals to students in

¹⁹³ See, for example, Long and Riley (2007), p. 40; Zeiser, Kristina et al., “Comparing Student Outcomes Between Student Support Services Participants and Nonparticipants in the 2004/09 Beginning Postsecondary Students Longitudinal Study,” U.S. Department of Education Office of Postsecondary Education, 2019, available at <https://www2.ed.gov/about/offices/list/opec/trio/sssparticipantsinbpls.pdf>, accessed August 4, 2024.

¹⁹⁴ Dean, James, “Access Fund Eased Pandemic’s Burden on Students,” Cornell University, May 7, 2020, available at <https://departments.as.cornell.edu/news/access-fund-eased-pandemics-burden-students>, accessed July 7, 2024; “Student & Campus Life Access Fund,” Cornell University, available at <https://scl.cornell.edu/belonging-support-services/centers-student-equity-empowerment-and-belonging/first-generation-low-income-student-support/access-fund>, accessed July 7, 2024.

¹⁹⁵ “Emergency Funds,” Cornell University Office of Financial Aid and Student Employment, available at <https://finaid.cornell.edu/special-circumstances/emergency-funds>, accessed August 5, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

need,¹⁹⁶ and through the Cornell Food Pantry, which provides food and personal care items.¹⁹⁷

- The Georgetown Scholars Program (“GSP”), launched in 2004, includes “Necessity Funding” for first-generation and low-income students that seeks to cover essential expenses, mentorship, and programming to build community. GSP students graduate from Georgetown at a rate of 95 percent, compared to a much lower college graduation rate among first-generation students nationally of 26 percent.¹⁹⁸
- MIT maintains a dedicated first-generation and low-income advising program that provides holistic academic advising, networking and community engagement, and professional development opportunities throughout students’ entire undergraduate career.¹⁹⁹
- Notre Dame staffs 17 first-year advisors who offer “mentorship, support, and guidance” as students make the transition to university life.²⁰⁰ The Office of Student Enrichment, founded in 2016, fosters inclusivity and support through various initiatives tailored for low-income students. Central to their efforts is the Fighting Irish Scholars Program, which awards \$2,000 grants to high-achieving students from under-resourced backgrounds each academic year.²⁰¹

¹⁹⁶ “Student & Campus Life - Swipe Out Hunger,” Cornell University, available at <https://scl.cornell.edu/belonging-support-services/centers-student-equity-empowerment-and-belonging/first-generation-low-income-student-support/swipe-out-hunger>, accessed July 7, 2024.

¹⁹⁷ Chuang, Louis and Hannah Kim, “Cornell Food Pantry Replaces Bread-N-Butter Pantry, Boasts Longer Hours, More Space,” The Cornell Daily Sun, October 29, 2019, available at <https://cornellsun.com/2019/10/29/cornell-food-pantry-replaces-bread-n-butter-pantry-boasts-longer-hours-more-space>, accessed July 7, 2024.

¹⁹⁸ “Georgetown Scholars Program Nears \$20M Goal to Permanently Fund Emergency Aid for First-Gen and Low-Income Students,” Georgetown University, July 1, 2022, available at <https://feed.georgetown.edu/access-affordability/georgetown-scholars-program-nears-20m-goal-to-permanently-fund-emergency-aid-for-first-gen-and-low-income-students/>, accessed July 7, 2024; “Georgetown Scholars Program Model,” Georgetown University, available at <https://gsp.georgetown.edu/how-it-works/model/>, accessed July 7, 2024; “Georgetown Scholars Program History,” Georgetown University, available at <https://gsp.georgetown.edu/about/gsp-program-history/>, accessed July 7, 2024.

¹⁹⁹ “First Gen & Low Income Program,” Massachusetts Institute of Technology, available at <https://firstyear.mit.edu/first-generation-program/>, accessed July 7, 2024.

²⁰⁰ “First Year Advisors,” University of Notre Dame, available at <https://advising.nd.edu/first-year-and-incoming-students/first-year-advisors/>, accessed July 7, 2024.

²⁰¹ “Fighting Irish Scholars,” University of Notre Dame, available at <https://studentenrichment.nd.edu/programming/fighting-irish-scholars/>, accessed July 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- The Penn College Achievement Program was introduced in 1971 and is designed to provide a range of academic and personal support services during the academic year to help underrepresented and first-generation students acclimate to the academic rigors of Penn.²⁰² Students gain access to academic support, workshops on career planning and financial budgeting, counseling, and participate in networking and community events.²⁰³ Penn has provided further programming and resources for its lowest-income students, like summer funding for internships and research, a laptop upon arrival, and funds for meals during school breaks.²⁰⁴

98. These dedicated resources to support low-income students increase the likelihood that these students can succeed and graduate, which provides students with improved economic opportunities. In 2020-2021, the median earnings level among federally-aided students who enrolled at a Defendant school in 2009 or 2010 was \$100,753.²⁰⁵ In comparison, in 2020, the median earnings level among bachelor's degree holders in the U.S. aged 25-34 was \$67,450.²⁰⁶

²⁰² “College Achievement Program,” University of Pennsylvania, available at <https://pennfirstplus.upenn.edu/college-achievement-program/>, accessed July 7, 2024; “An Assortment of Acronyms and Abbreviations at Penn,” University of Pennsylvania Almanac, November 24, 2015, available at <https://almanac.upenn.edu/articles/an-assortment-of-acronyms-and-abbreviations-at-penn>, accessed August 3, 2024.

²⁰³ “College Achievement Program,” University of Pennsylvania, available at <https://pennfirstplus.upenn.edu/college-achievement-program/>, accessed July 7, 2024.

²⁰⁴ Deposition of Matthew Sessa, Executive Director of Student Registration and Financial Services at University of Pennsylvania, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 December 15, 2023 (“Sessa Deposition”), 73:5-74:15.

²⁰⁵ The median earnings level among federally-aided students who enrolled at a Defendant school in 2009 or 2010 is measured in 2020 and 2021 among those who were working, and is reported in constant 2022 dollars, adjusted using the CPI. Backup materials to this report (Scorecard); “Download the Data,” U.S. Department of Education College Scorecard, available at <https://collegescorecard.ed.gov/data/>, accessed July 25, 2024.

²⁰⁶ The median earnings level among bachelor's degree holders in the U.S. aged 25-34 is adjusted for inflation to 2022 dollars using the CPI from FRED (“Consumer Price Index for All Urban Consumers: All Items in U.S. City Average,” Federal Reserve Bank of St. Louis, June 2024, available at <https://fred.stlouisfed.org/series/CPIAUCNS>, accessed August 7, 2024). National Center for Education Statistics, *Median annual earnings of full-time year-round workers 25 to 34 years old and full-time year-round workers as a percentage of the labor force, by sex, race/ethnicity, and educational attainment, 2020*, available at https://nces.ed.gov/programs/digest/d21/tables/dt21_502.30.asp.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

99. As discussed throughout this section, each Defendant has invested in numerous initiatives and adopted policies that increase socioeconomic diversity in their student bodies. These efforts target students throughout the application process, from encouraging applications from low-income students and assisting admissions officers in fairly evaluating low-income applicants to encouraging low-income admitted students to matriculate and supporting enrolled low-income students during their college years. Each Defendant has invested substantial time, energy, and resources to increase equity in and access to higher education, at the expense of the potential for greater tuition revenue from higher-income students. It thus would not be logical to think that absent the Challenged Conduct, Defendants would have adopted financial aid philosophies, principles, or policies that were inconsistent with these broader and long-standing missions shared by Defendants and their peers.

D. Defendants Are Very Different from For-Profit Businesses

100. Ms. Mora argues that Defendants “are complex organizations that, in many material respects, operate like for-profit businesses using sophisticated investment strategies.”²⁰⁷ To the contrary, a defining characteristic of for-profit businesses is that, while they may pursue many different goals, a central consideration is generating profits that are distributed to shareholders.²⁰⁸ By contrast, to qualify as a non-profit, an organization must “not be

²⁰⁷ Mora Report, ¶ 5.

²⁰⁸ Brealey et al. (2020), Chapter 1, p. 1.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

organized or operated for the benefit of private interests” and “none of its earnings may inure to any private shareholder or individual.”²⁰⁹

101. Ms. Mora fails to consider each Defendant’s educational and societal missions, which are critical to understanding why each Defendant pursues a range of activities that are actually revenue-losing, but support their educational and societal missions and goals. As discussed throughout **Sections II.A-C**, each Defendant invests in numerous activities that are not expected to maximize revenue, but that reflect a commitment to improving educational experiences, access to education, social mobility, and socioeconomic diversity. These efforts are costly, both in terms of resources to implement various efforts and in terms of the provision of substantial financial aid. This investment reflects each Defendant’s underlying commitment to its individual educational and societal missions, and highlights how Defendants differ starkly from for-profit businesses.
102. Simply put, Ms. Mora’s attempt to equate non-profit universities to for-profit entities is absurd. The differences between Defendants and for-profit businesses are evident across basic fundamentals like the economic incentives, informational environments, and production technologies they face.²¹⁰ In drawing a comparison between Defendants and for-profit businesses, Ms. Mora fails to consider the stark differences between Defendants and for-profit schools, and instead relies on broad operational categories to characterize Defendants’ activities that are applicable to any complex organization.²¹¹ Ultimately, Ms.

²⁰⁹ “Exemption Requirements - 501(c)(3) Organizations,” IRS, available at <https://www.irs.gov/charities-non-profits/charitable-organizations/exemption-requirements-501c3-organizations>, accessed July 26, 2024.

²¹⁰ Production technologies refer to the way in which a product is produced. In higher education, schools use a consumer-input technology, where students are both the inputs and outputs to the process, as I describe in **Section II.B**. Winston (1999).

²¹¹ Mora Report, ¶¶ 20-31.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Mora's suggestion that non-profit universities are "like" for-profit organizations because they share certain generic characteristics common to many complex organizations ignores fundamental distinctions between Defendants (and their peers) and for-profit entities.

1. For-Profit Schools Operate Very Differently from Defendants

103. Ms. Mora ignores that there does exist a for-profit higher education sector, which operates vastly differently from Defendants and their peer schools. For-profit schools have a mission to create shareholder value,²¹² in stark contrast to the educational and societal missions of Defendants and their peer schools described in **Section II.A.**

104. As a result, for-profit schools tend to offer a much narrower set of academic programs than the wide-ranging academic offerings each Defendant provides, as described in **Section II.A.1.**²¹³ For-profit schools' academic programs are further focused on vocational certificate programs and career or technical education.²¹⁴ For-profit schools also have very different expenditure levels and patterns, with much lower amounts devoted to teaching students,²¹⁵ and limited resources for student support and a lack of student organizations.²¹⁶

The majority of for-profit schools are predominantly operated online, to avoid investment

²¹² Cellini, Stephanie, "For-Profit Colleges in the United States: Insights from Two Decades of Research," in *The Routledge Handbook of the Economics of Education*, 1 Ed., Routledge, 2022.

²¹³ "For-Profit vs. Nonprofit Colleges: What's the difference and why does it matter?," BigFuture, available at <https://bigfuture.collegeboard.org/plan-for-college/find-your-fit/types-of-colleges/types-of-colleges/for-profit-vs-non-profit>, accessed August 6, 2024.

²¹⁴ Cellini (2022), p. 513.

²¹⁵ In 2016-2017, for-profit schools spent only \$4,500 per full-time equivalent student on instruction, in contrast to the over \$18,000 spent by private non-profits. See Snyder, Thomas D. et al., "Digest of Education Statistics 2018," National Center for Education Statistics, December 2019, available at <https://nces.ed.gov/pubs2020/2020009.pdf>, accessed August 4, 2024, Tables 334.30 and 334.50.

²¹⁶ "Who Profits? Students' Experiences at For-Profit Colleges," Public Agenda, January 1, 2023, available at <https://publicagenda.org/resource/who-profits-students-experiences-at-for-profit-colleges/>, accessed July 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

in facilities;²¹⁷ Defendants, by contrast, invest substantially in activities outside of the classroom, such as residential communities and public goods such as libraries and museums, as described in **Section II.A.1**.

105. The University of Phoenix is an example of a for-profit school that contrasts starkly with Defendants. In the 2022-2023 academic year, the University of Phoenix graduated the vast majority of its students in Business Administration and Healthcare Management; had a student-faculty ratio of 110:1; employed only 80 full-time instructional staff but 2,548 part-time instructional staff, with no faculty employed in research; and had 100 percent of its undergraduates enrolled in online distance education.²¹⁸ By contrast, in the same year, Georgetown (for example) graduated students across a range of fields of study, such as International Relations and Affairs, Political Science and Government, Econometrics and Quantitative Economics, and Finance, as well as Linguistics, Medieval and Renaissance Studies, and Art History; had a student-to-faculty ratio of 11:1; had 1,305 full-time instructional staff and 1,474 part-time instructional staff, with an additional 429 employed full-time in research; and emphasized an in-person learning and living environment.²¹⁹
106. In pursuit of creating shareholder value, for-profit schools rely heavily on tuition revenues and capturing federal subsidies such as Pell Grants and federal student loans.²²⁰ Tuition

²¹⁷ In 2015, 55 percent of for-profit four-year students were enrolled exclusively online, compared to just 18 percent for non-profits. See Cellini (2022), p. 515, Fig. 17.3.

²¹⁸ "University of Phoenix-Arizona," NCES, available at <https://nces.ed.gov/collegenavigator/?id=484613>, accessed July 25, 2024.

²¹⁹ "IPEDS Institution Data Profile - Georgetown University," National Center for Education Statistics, 2023, available at <https://nces.ed.gov/collegenavigator/?q=georgetown&s=all&id=131496>, accessed July 28, 2024.

²²⁰ Cellini, Stephanie and Claudia Goldin, "Does Federal Student Aid Raise Tuition? New Evidence on For Profit Colleges," *American Economic Journal: Economic Policy*, Vol. 6, No. 4, November 2014.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

and fees make up more than 90 percent of the revenues at for-profit schools,²²¹ which is more than triple the proportion for Defendants, on average.²²² Most notably, the substantial institutional grant aid provided by Defendants as described in **Section II.A.2**, contrasts for-profit schools which provide very limited institutional grant aid to students, if they provide such aid at all.²²³

107. Due to these and other practices designed to create shareholder value, for-profit schools are associated with adverse student outcomes in terms of employment rates, earnings, and default rates on loans in comparison both to Defendants and to non-profit higher education in general.²²⁴ In fact, one study finds that there is no earnings gain for for-profit students relative to high school graduates with no higher education.²²⁵ There has also been extensive documentation of fraud, deceptive marketing, and harmful practices intended to entice students to enroll at for-profit schools, minimize educational support, and maximize federal

²²¹ Tuition revenue shares are measured in FY2016. Snyder et al., “Digest of Education Statistics 2018,” National Center for Education Statistics, December 2019, available at <https://nces.ed.gov/pubs2020/2020009.pdf>, accessed August 4, 2024, Table 333.55.

²²² Tuition and fees made up 28.3 percent of revenues at Defendant schools in FY2016, on average. This information is reported in IPEDS in the field “Tuition and fees as a percent of core revenues.” IPEDS calculates this field as revenues from tuition and fees (net of refunds, discounts, and allowances) divided by total core revenues (revenues from tuition and fees; federal, state, local, and private gifts, grants, contracts, and appropriations; contributions from affiliated entities; investment returns; sales and services of educational activities; and other revenues). Backup materials to this report (IPEDS, Expenditures v. Revenues); National Center for Education Statistics, *Integrated Postsecondary Education Data System*, available at <https://nces.ed.gov/ipeds/datacenter>.

²²³ In 2016-2017, only 19 percent of students at private for-profit schools received on average \$3,300 in institutional grant aid. Snyder et al., “Digest of Education Statistics 2018,” National Center for Education Statistics, December 2019, available at <https://nces.ed.gov/pubs2020/2020009.pdf>, accessed August 4, 2024, Table 331.20.

²²⁴ *See, for example*, Cellini (2022); Cellini, Stephanie and Nicholas Turner, “Gainfully Employed? Assessing the Employment and Earnings of For-Profit College Students Using Administrative Data,” *The Journal of Human Resources*, Vol. 52, No. 2, 2018; Darolia, Rajeev, “Messengers of Bad News or Bad Apples? Student Debt and College Accountability,” *Association for Education Finance and Policy*, 2015. Detailed information about default rates can be found at “Official Cohort Default Rates for Schools,” Federal Student Aid, November 20, 2023, available at <https://fsapartners.ed.gov/knowledge-center/topics/default-management/official-cohort-default-rates-schools>, accessed July 7, 2024.

²²⁵ Cellini and Turner (2018).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

subsidies once they attend.²²⁶ Taken together, all of this shows that for-profit schools provide entirely different educational experiences and thus student outcomes than Defendants: on average across for-profits, the median federally-aided graduate earns only \$32,666 ten years after enrolling, compared to \$100,753 on average across Defendants.²²⁷

108. In summary, for-profit schools do not attempt to take on the wide-ranging activities that Defendants do, and consequently no for-profit school could realistically fulfill the role that Defendants play in society. Ms. Mora's attempt to characterize Defendants as similar to for-profit businesses fails to contend with the real-life examples of what a profit-motivated higher education institution looks like, and the sharp contrast between for-profit schools and non-profit schools—including, but not limited to, Defendants.

2. Ms. Mora's Seven "Critical Ways" in Which Defendants Operate Similarly to Diversified For-Profit Conglomerate Businesses Are Overly Broad and Do Not Define For-Profit Conglomerates

109. In contending that Defendants "broadly operate in ways that are similar to public companies," Ms. Mora narrowly focuses on seven operational characteristics that she claims are "critical ways" that Defendants "operate similarly" to for-profit conglomerate businesses: (1) large numbers of employees; (2) multiple separate departments; (3) revenue-generating and revenue-losing activities; (4) discretion over expenditures; (5) governance structures; (6) executive and administrative staff; and (7) real estate

²²⁶ Kutz, Gregory, "For-Profit Colleges," United States Government Accountability Office, 2010, available at <https://www.gao.gov/assets/gao-10-948t.pdf>, accessed July 7, 2024.

²²⁷ The median earnings level among federally-aided students who enrolled at a Defendant school or a for-profit school in 2009 or 2010 is measured in 2020 and 2021 among those who were working, and is reported in constant 2022 dollars, adjusted using the CPI. Backup materials to this report (Scorecard); "Download the Data," U.S. Department of Education College Scorecard, available at <https://collegescorecard.ed.gov/data/>, accessed July 25, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

ownership.²²⁸ Rather than contend with the educational and societal missions of each Defendant that influences every aspect of how each Defendant operates, or with the clear counter-example of for-profit schools, Ms. Mora simply selects a handful of very high-level characteristics that Defendants happen to have in common with for-profit conglomerates, as well as governmental entities and other non-profits.

110. Ms. Mora provides no justification for why these particular characteristics are defining features of either a for-profit business or a higher-education institution—they are not. The mere fact that an organization has a complex organizational structure including a large staff, multiple departments, and inflows and outflows of money has no bearing on the fundamental mission of the organization. These characteristics simply reflect standard characteristics of large, complex organizations. Organizational complexity is a characteristic shared by any entity that faces multifaceted objectives and uncertainty in the environment in which it operates.²²⁹ For example, the U.S. Department of Education itself employs 4,400 people, contains 17 different offices and institutes, and is overseen by 28 senior officials.²³⁰ Similar to Defendants, this multitude of departments and large executive staff is inherent to the Department of Education's critical role in society, and does not suggest that the federal government is like a for-profit corporation.

²²⁸ Mora Report, ¶¶ 20-31.

²²⁹ Dooley, Kevin, "Organizational Complexity," *International Encyclopedia of Business and Management*, 2002.

²³⁰ "About ED," U.S. Department of Education, available at <https://www2.ed.gov/about/landing.jhtml>, accessed July 25, 2024; "Operating Structure," U.S. Department of Education, available at <https://www2.ed.gov/about/offices/or/index.html>, accessed July 25, 2024; "Biographies of Senior Officials - U.S. Department of Education," U.S. Department of Education, available at <https://www2.ed.gov/news/staff/bios/index.html>, accessed August 1, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

111. As another example, the Smithsonian Institution has: (1) a large number of employees (approximately 6,800);²³¹ (2) multiple separate departments (11 administrative departments, 18 museums and galleries, and 14 education and research departments);²³² (3) revenue-generating (magazine subscriptions) and revenue-losing (museums free of charge) activities;²³³ (4) discretion over expenditures (for example, prioritizing which museums to renovate);²³⁴ (5) governance structures (a 17-person Board of Regents that is tasked with overseeing the organization's mission and electing and setting the compensation of the Secretary);²³⁵ (6) executive and administrative staff (11 senior leaders and over 2,000 administrative staff);²³⁶ and (7) real estate ownership (\$1.3 billion in real estate, separately from the \$3.5 billion in federal land and buildings appropriated for its use).²³⁷

²³¹ "2021 Income Tax Return," Smithsonian Institution, available at <https://www.si.edu/sites/default/files/about/2021-smithsonian-form-990.pdf>, accessed July 7, 2024, p. 2.

²³² "Smithsonian Organizational Chart," Smithsonian Institution, 2024, available at <https://www.si.edu/sites/default/files/Admin/smithsonian-organizational-chart.pdf>, accessed July 7, 2024.

²³³ "Museum Hours and Locations: Visiting our Museums, Galleries, and Zoo," Smithsonian, available at <https://www.si.edu/visit/hours>, accessed August 1, 2024; "2021 Income Tax Return," Smithsonian Institution, available at <https://www.si.edu/sites/default/files/about/2021-smithsonian-form-990.pdf>, accessed July 7, 2024.

²³⁴ "Smithsonian Fiscal Year 2023 Federal Budget Totals More Than \$1 Billion," *Smithsonian Institution*, January 9, 2023, accessed July 7, 2024, available at <https://www.si.edu/newsdesk/releases/smithsonian-fiscal-year-2023-federal-budget-totals-more-1-billion>.

²³⁵ "Smithsonian Duties and Responsibilities of the Regents," Smithsonian Institution, April 12, 2010, available at https://www.si.edu/content/governance/pdf/Duties_and_Responsibilities_of_the_Regents_4-12-10.pdf, accessed July 7, 2024; "Members of the Board of Regents," Smithsonian, available at <https://www.si.edu/regents/members>, accessed August 1, 2024.

²³⁶ "Smithsonian Organizational Chart," Smithsonian Institution, 2024, available at <https://www.si.edu/sites/default/files/Admin/smithsonian-organizational-chart.pdf>, accessed July 7, 2024; "Under Secretary for Finance and Administration | Chief Financial Officer," Smithsonian Institution, available at <https://www.si.edu/about/ousa>, accessed July 7, 2024.

²³⁷ "Financial Statements and Notes to Financial Statements," Smithsonian Institution, January 26, 2022, accessed July 7, 2024, p. 24.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

112. However, the fact that the Smithsonian Institution shares these characteristics does not suggest that it is a profit-seeking organization, rather than a mission-driven non-profit. Instead, the Smithsonian Institution describes its purpose as “the increase and diffusion of knowledge” and its vision as striving “to provide Americans and the world with the tools and information they need to forge Our Shared Future.”²³⁸ In pursuit of that mission, the Smithsonian Institution conducts a host of activities that a for-profit conglomerate business would not, including creating the largest museum complex in the world, housing over 150 million objects and specimens in 21 museums plus a zoo, almost entirely free of charge.²³⁹ It would be absurd to suggest that the Smithsonian Institution operates as a for-profit conglomerate, simply because it is a large and complex organization, and it is similarly absurd to suggest as much about Defendants.
113. Indeed, many well-recognized non-profit organizations share these same characteristics, including charitable foundations like the Bill & Melinda Gates Foundation, mission-driven hospitals like the Mayo Clinic, and emergency relief foundations like the American National Red Cross.²⁴⁰

²³⁸ “Purpose and Vision - Smithsonian,” Smithsonian, available at <https://www.si.edu/about/mission>, accessed July 7, 2024.

²³⁹ Among Smithsonian Institution museums, only the Cooper Hewitt Design Museum, in New York City, charges for admission. *See* “Museum Hours and Locations: Visiting our Museums, Galleries, and Zoo,” Smithsonian, available at <https://www.si.edu/visit/hours>, accessed August 1, 2024.

²⁴⁰ “Bill & Melinda Gates Foundation Consolidated Financial Statements December 31, 2023 and 2022,” KPMG, May 23, 2024, available at <https://www.gatesfoundation.org/about/financials>, accessed August 2, 2024; “Bill & Melinda Gates Foundation Trust Financial Statements December 31, 2023 and 2022,” KPMG, May 22, 2024, available at <https://www.gatesfoundation.org/about/financials>, accessed August 2, 2024; “Mayo Clinic 2022 Fact Sheet,” Mayo Clinic, 2022, available at <https://newsnetwork.mayoclinic.org/n7-mcnn/7bcc9724adf7b803/uploads/2023/04/2022-Mayo-Clinic-Fact-Sheet-.pdf>, accessed July 28, 2024; “Solving the World’s Toughest Medical Problems,” Mayo Clinic, available at <https://www.mayoclinic.org/about-mayo-clinic>, accessed June 5, 2024; “Medical Departments and Centers,” Mayo Clinic, available at <https://www.mayoclinic.org/departments-centers>, accessed July 28, 2024; “Research Departments and Divisions,” Mayo Clinic, available at <https://www.mayo.edu/research/departments-divisions>, accessed June 5,

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

114. Ultimately, Ms. Mora's opinion that Defendants "in many material respects, operate like for-profit businesses"²⁴¹ reflects a view of higher education institutions that ignores the fundamental purpose and mission of these schools in favor of shallow and meaningless comparisons.

III. THE 568 GROUP WAS FORMED TO IMPROVE EQUITY AND TRANSPARENCY IN NEED ANALYSIS

115. As discussed in **Section II.C.4**, need-based financial aid is an important tool for fulfilling each Defendant's mission for increasing access, as without financial aid, many students would be unable to afford Defendant schools, educational opportunities would be restricted to wealthier students, and educational quality would suffer. To ensure that each school's institutional grant aid is fairly and equitably distributed to those admitted students who truly do not have the financial means to attend otherwise, each Defendant estimates students' financial need.
116. Defendants and other schools similarly focused on increasing access were some of the few schools in the U.S. that offer both need-blind admissions and a guarantee to meet full financial need. These schools recognized that the magnitude of their financial aid programs and the important commitments that they were making to increase educational equity, access, and excellence required attention and discussion dedicated to the issue of need analysis. This was especially important at the time of the 568 Group's founding due to increasing questions and debates about the most accurate way to measure need, and

2024 ; "2019 Annual Report," American Red Cross, 2019, available at <https://www.redcross.org/content/dam/redcross/about-us/publications/2019-publications/Annual-Report-2019.pdf>, accessed August 4, 2024.

²⁴¹ Mora Report, ¶ 5.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

concerns about the viability of various need analysis approaches in terms of institutional sustainability. As my analysis of documentary evidence and academic literature demonstrates, Defendants and other similarly access-focused schools created the 568 Group to discuss and develop recommendations for best practices in need analysis. These discussions and best practices improved the American financial aid system and led to guidelines around specific elements of need analysis, many of which resulted in lower EFCs for many students, therefore benefiting proposed class members.

117. There were many efforts in the higher education industry and by the federal government, nonprofit organizations, and industry groups, including the 568 Group, to continually refine need analysis methodologies as the financial circumstances of students eligible for need-based aid became increasingly varied and nuanced, and as schools and other organizations adapted to contend with these complex circumstances. These efforts centered on the goals of increasing access for students by better meeting their financial needs in a fair and equitable way.

A. Need Analysis Systems Are Designed to Equitably Distribute Finite Need-Based Financial Aid Across Families with Varied Economic Circumstances

1. Need Analysis Systems that Honor Both Vertical and Horizontal Equity for Students Are Complex and Nuanced

118. Schools focused on increasing educational access, including Defendants, implemented need analysis systems consistent with each school's effort to allocate finite aid resources fairly, so that those with the greatest level of financial need receive the most financial aid (i.e., vertical equity), and students with similar levels of financial need receive similar

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

amounts of financial aid (i.e., horizontal equity).²⁴² While it would be convenient for schools to simply rely on common measures of a family's financial circumstances in calculating financial need such as adjusted gross income ("AGI"), which is an important measure in calculating federal tax liability, these measures fail to adequately capture the financial picture for many families with college-aged children. For instance, AGI does not incorporate the earnings of people who may have complex investments, assets, and expenses.²⁴³ Failing to account for these financial situations and treating all families with the same income equally can lead to inequitable outcomes.

119. To demonstrate this concern, consider two students whose families report the same annual income and net worth, but one family lives in Massachusetts (which has the fourth-highest cost of living for all states) while the other lives in Mississippi (which has the fifth-lowest cost of living for all states).²⁴⁴ Despite having the same income, these two families may have different financial circumstances driven by differences in the cost of living they experience. Therefore, expecting both families to contribute the same amount to their child's college education may not be an equitable outcome. Additionally, the exact family composition and other metrics might be important to an equitable calculation of financial aid. If one of these families is supporting multiple dependents, they might not be able to contribute as much of their income to college expenses as a family with fewer dependents

²⁴² Baum, "A Primer on Economics for Financial Aid Professionals," CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, p. 8.

²⁴³ Baum, "A Primer on Economics for Financial Aid Professionals," CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, p. 60.

²⁴⁴ "Cost of Living Data Series," Missouri Economic Research and Information Center, 2024, available at <https://meric.mo.gov/data/cost-living-data-series>, accessed August 2, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

because their essential expenses are higher. Without information on the exact spending patterns of the two families as well as on their family context, it would be difficult to determine which family truly has more need.

120. As another example, consider three families that report the same annual income, but (i) one family has simple W-2 income from the parents' full-time employment, (ii) the second family reports half its income from real estate investments that accounts for depreciation and other losses reported on tax forms, and (iii) the third family reports income from a home child-care business. The W-2 income is simple to verify, but the incomes from the other two families are more complex to assess for purposes of evaluating a family's ability to pay for college. For the second family with real estate investments, depreciation and losses lower the family's reported income on paper, but "do not necessarily reduce the family's cash flow or their ability to make financial decisions."²⁴⁵ The fact that the family owns real estate properties also suggests that it may be in a stronger overall financial position than the other families. Income from a home child-care business is also not simple W-2 income, and appropriately accounting for the revenue and expenses related to such an endeavor is difficult. Such circumstances highlight the challenge to determining how much each family is able to pay for higher education given their different income sources and assets.

121. As shown by the above examples, determining how to interpret and evaluate families' myriad income sources, assets, and expenses to ensure vertical and horizontal equity is a complex task. In essence, the details of a family's income, expenses, and context, which

²⁴⁵ NULIT-0000000680 ("Institutional Methodology User Guide," Northwestern University, July 15, 2021) at 690.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

could include their location, living situation, and a host of other factors such as the parents' occupations and work histories, would be needed to determine how to equitably define need across students.

122. Given the complexity and multiple ways to interpret different family situations, building a fair need analysis system requires significant expertise. However, even with extensive information and expertise, financial aid offices face an enormous challenge because there is often no single "right" answer to the question of how much a family can afford to pay for their child's higher education. What one person might deem as an essential expense that cannot be reallocated to paying for college, another person might consider discretionary. Additionally, opinions can vary about whether and how to count the income of noncustodial parents and to what degree a family's home equity or other illiquid assets should be considered as part of their wealth.
123. To manage the complex process and debatable questions about what should and should not be included in a fair need analysis, schools that provide need-based financial aid typically develop a need analysis methodology and use software to process and analyze the extensive information they receive, guided by manuals or guidelines for their financial aid officers to use when reviewing students' EFCs. This process constitutes the institution's baseline need analysis approach, including how the school aims to treat different students equitably while taking into account recommendations on how to deal with the particular family circumstances such as those discussed above.
124. In addition to common practices for need analysis, financial aid officers can also apply their professional judgment throughout the need analysis process, including making adjustments to inputs to the need analysis software, as well as adjustments directly to the

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

software-outputted EFC. Professional judgment refers to the officers' individual discretion to address nuanced circumstances that are not otherwise or adequately accounted for in the baseline need analysis methodology.²⁴⁶ Different financial aid officers can therefore estimate different EFCs for a given family, even when looking at the same financial information, if they, for example, deem it necessary to treat depreciation or losses against reported income differently or to evaluate the expenses for a home child-care business differently. Professional judgment has been an important way for schools to address unusual profiles of admitted students. Over time, however, the goal is for frequently recurring circumstances to be accounted for by the baseline rules or methods, reserving professional judgment adjustments for one-off or unique situations.

2. Need Analysis Systems Grew in Complexity as Schools Sought to Address the Needs of a Wider Range of Student Backgrounds

125. As illustrated in the examples above, need analysis can quickly become a complex endeavor when trying to ensure vertical and horizontal equity, even among students with relatively common financial profiles. Several social and demographic shifts in the past few decades increased the range of variation in applicant backgrounds. At the same time, Defendants' and their peers' commitments to social mobility prompted them to admit increasingly diverse groups of students, further increasing the range of familial circumstances being presented to university financial aid offices. Accordingly, these

²⁴⁶ See, for example, "What is Professional Judgment?," Federal Student Aid, available at <https://studentaid.gov/help-center/answers/article/what-is-professional-judgment>, accessed July 7, 2024 ("When there are unusual situations or circumstances that impact your federal student aid eligibility, federal regulations give a financial aid administrator discretion or professional judgment on a case-by-case basis and with adequate documentation to make adjustments to the data elements [...] that impact your Expected Family Contribution (EFC) to gain a more accurate assessment of your family's ability to contribute to your cost of education.").

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

schools needed to adjust, adapt, and expand their need analysis systems to handle the increasingly varied financial circumstances they encountered.

126. One of the factors that changed over time was the family structure of applicants. For example, in 2004, the College Board noted that “about half of all marriages now end in divorce” and that “the absence of a common approach to these families is increasingly problematic.”²⁴⁷ Accordingly, the College Board worked with the 568 Group to develop a systematic approach to the collection of financial information from both natural and adoptive parents, along with a need analysis system that accounted for information on the non-custodial parent, which was introduced in 2005-2006.²⁴⁸ Another societal shift that had implications for need analysis is the trend of delayed parenthood,²⁴⁹ which required many schools to treat factors such as retirement savings and healthcare costs differently given the relatively higher age of applicants’ parents. More recently, the rise of the gig economy has required schools to consider new sources of irregular income.²⁵⁰ Meanwhile, financial crises, natural disasters, and the global pandemic have required schools to adapt

²⁴⁷ Baum, “A Primer on Economics for Financial Aid Professionals,” CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, p. 63.

²⁴⁸ CBD000546 (“CSS/Financial Aid Profile User’s Guide,” CollegeBoard, 2005-2006), at 582; NULIT-0000000348 (“568 Presidents’ Group: Consensus Methodology Policy Guidelines,” 568 Presidents’ Group, 2016) at 353.

²⁴⁹ Schweizer, Valerie and Karen Benjamin Guzzo, “Distributions of Age at First Births, 1960-2018,” Bowling Green State University and National Center for Family & Marriage Research, 2020, available at <https://www.bgsu.edu/ncfmr/resources/data/family-profiles/schweizer-guzzo-distribution-age-first-birth-fp-20-11.html>, accessed July 25, 2024.

²⁵⁰ Delouya, Samantha, “The Rise of Gig Workers is Changing the Face of the US Economy,” CNN Business, July 25, 2023, available at <https://www.cnn.com/2023/07/24/economy/gig-workers-economy-impact-explained/index.html>, accessed July 25, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

quickly to sudden changes in students' financial circumstances and to incorporate these situations into their need analysis systems.²⁵¹

127. In my experience, discussions within the financial aid community were critical to helping the higher education industry and individual schools to reevaluate and update their need analysis methodologies in order to continue to treat students in widely varying financial circumstances equitably.

*3. Case-by-Case Adjustments Through Appeals Highlight Challenges
Inherent in Need Analysis, but Extensive Reliance on Appeals Risks
Introducing Inequities*

128. Financial aid officers devote considerable time and energy to reviewing each applicant's personal financial information and developing a personalized aid package that reflects the financial aid officer's best attempt to understand the applicant's complex financial circumstances, both in isolation and relative to other applicants. However, because of the nuances inherent in the need analysis process and the potential for a student's financial circumstances to change over time, Defendants and their peers have appeals processes through which applicants and current students can ask for reconsideration of their initial

²⁵¹ See, for example, Chang Deposition, 67:9-68:16 ("Q. And can you give me an example of any larger issues that you can recall addressing during the school's membership in 568? A. Yes. [...] Natural disasters was [sic] something that came up. California has a lot of -- that was during a time where California had a lot of fires, and it wasn't something that was sort of codified in, you know, our way of reviewing. I mean, there are certain things where, if you had, you know, something that happened to your house maybe. But there wasn't sort of a larger, like, here are natural disasters, they are happening more often, and they are a big hardship on families, and should this be something that we start thinking about and having a way to inform families that if you were a victim of natural disaster, that this is something that is a big change and to let the financial aid know about that. So that is something. We're sort of taking a larger view of what's happening in the country that would have an impact on the financial aid office."); COFHE-02-00015316 ("Fallout from the Economy: Financial Aid Implications," 568 Presidents' Group, January 28, 2009); ND_0011975 ("Email with subject line '[568techcommittee] Draft Meeting Agenda & PJ Manual'," April 16, 2020); ND_0011976 ("Professional Judgment Guidelines Manual," University of Notre Dame, October 2019) at 983, 985.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

aid offer.²⁵² The appeals process acts as a safety net on the financial aid process, but can lead to inequitable outcomes if overly relied on, as it tends to favor students with resources to navigate the system.

129. After receiving an appeal, financial aid officers re-review the applicant's entire file to determine whether to adjust the financial aid award, and they may apply professional judgment to account for any new information or context provided.²⁵³ Financial aid officers will either approve or deny the appeal. An approval results in students receiving an increased financial aid offer, but a denial does not result in an offer of less financial aid.²⁵⁴
130. While the appeals process is an internal check on the financial aid process, it is time-consuming, inherently case-by-case, and it requires the applicant to be savvy enough to know that reconsideration is possible and to pursue such a process. As a result, the appeals process can lead to increased inequitable outcomes, favoring better-resourced students. For example, an appeals letter from a parent of an MIT applicant in April 2011 reflects how useful advanced financial literacy can be in navigating the appeals process. First, the parent provided detail regarding the breakdown of their total family income, noting the

²⁵² See, for example, Chang Deposition at 70:18-71:15; Deposition of Leslie Bridson, Director of Student Financial Services at Massachusetts Institute of Technology, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 July 13, 2013 ("Bridson Deposition") at 165:13-21, 168:13-18.

²⁵³ For example, Cornell's website on financial aid appeals describes the different circumstances in which an appeal is considered or not considered, and the role of professional judgment in adjusting financial aid offers. See "Financial Aid Appeals," Cornell University, available at <https://finaid.cornell.edu/special-circumstances/financial-aid-appeals>, accessed July 7, 2024.

²⁵⁴ See, for example, UCHICAGO_0000227636 ("Frosh Appeals," University of Chicago, April 2016) (tracking appeals outcomes); GTWNU_0000244494 ("Appeals," Georgetown University, 2021) (tracking appeals outcomes); "How to Appeal Financial Aid Award Packages," finaid, available at <https://finaid.org/financial-aid-applications/financial-aid-appeal/>, accessed July 24, 2024 (describing the appeals process and its possible outcomes); "How America Pays for College: Sallie Mae's National Study of College Students and Parents," Sallie Mae, 2023, available at <https://www.salliemae.com/content/dam/slm/writtencontent/Research/HowAmericaPaysforCollege2023.pdf>, accessed July 24, 2024, pp. 73-75 (collecting data on appeals and their outcomes).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

discrepancy in the calendar year required by financial aid forms and the academic year income.²⁵⁵ Second, the parent noted several levers that could be adjusted to change the picture of their financial circumstances—the parent noted that if outside scholarships reduced the student contribution, they could contact these scholarship sources to have them distribute the scholarship in later years; the parent also speculated whether they could have received a better financial aid offer from MIT had they purchased a new house the prior year so that they would have reported no savings.²⁵⁶ This advocacy led to the applicant's financial aid offer being increased by \$3,490.²⁵⁷

B. There Is a Long History of Efforts by the Higher Education Industry to Develop Better Approaches to Need Analysis

131. In my courses on financial aid—which I have taught to graduate students and working higher education professionals—I find it useful to provide the historical context of need analysis to illustrate the issues and challenges higher education institutions have been facing for decades. Similarly, to understand each Defendant's need analysis methodologies and the 568 Group's discussions on best practices for need analysis, context on the development of need analysis systems in the U.S. is informative.
132. Demand for higher education among low- and middle-income students started to increase in the 1950s, following the G.I. Bill.²⁵⁸ Given their financial resources, these students needed more federal and institutional financial aid in order to be able to afford to attend

²⁵⁵ MITLIT-000295744 (“Aid Appeal,” Massachusetts Institute of Technology, April 21, 2011) at 745-747.

²⁵⁶ MITLIT-000295744 (“Aid Appeal,” Massachusetts Institute of Technology, April 21, 2011) at 744-745.

²⁵⁷ MITLIT-000295744 (“Aid Appeal,” Massachusetts Institute of Technology, April 21, 2011) at 745-747.

²⁵⁸ Fuller, Matthew B., “A History of Financial Aid to Students,” *Journal of Student Financial Aid*, Vol. 44, No. 1, July 25, 2014, pp. 49-50.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

higher education institutions. This necessitated advancement in the need analysis methodologies of the time because existing processes were ill-equipped to provide a useful framework for handling the range of new low- and middle-income student profiles.²⁵⁹

133. In 1953, Harvard introduced the first institutional need analysis formula called the “15 percent rule,” which calculated families’ expected contribution as 15 percent of net income, less a deduction for each child attending a public school, private school, or college.²⁶⁰ Harvard’s need analysis formula led the College Board to work with schools to ultimately establish the College Scholarship Service (“CSS”) in 1954.²⁶¹ Over the next two decades, the CSS established its own need analysis method and streamlined the way in which student financial information was collected for nearly 100 schools,²⁶² with the goal of “develop[ing] objectives and procedures of financial aid administration that permitted colleges to allocate their student aid funds more rationally, to increase opportunity, and to serve students more effectively.”²⁶³ At the same time, other organizations, such as American College Testing (“ACT”), also developed alternative need analysis methods for

²⁵⁹ Fuller (July 25, 2014), pp. 49-50 (describing the G.I. Bill and its effects on the types of students looking to attend higher education institutions); CBD000001 (“2003-2004 School Year IM Users’ Guide,” The College Board, 2003) at 022 (same).

²⁶⁰ “How the Federal Government Distributes Aid to Students,” Lumina Foundation & IHEP, available at <https://www.luminafoundation.org/files/resources/form-and-formula-viewing-guide.pdf>, accessed December 7, 2023, p. 4.

²⁶¹ “Need Analysis,” National Association of Independent Colleges and Universities, available at <https://www.naicu.edu/policy-advocacy/issue-brief-index/student-aid/needanalysis>, accessed December 7, 2023.

²⁶² “How the Federal Government Distributes Aid to Students,” Lumina Foundation & IHEP, available at <https://www.luminafoundation.org/files/resources/form-and-formula-viewing-guide.pdf>, accessed December 7, 2023, p. 4.

²⁶³ Deposition of David Meade, Vice President of Financial Aid Programs and Services at CollegeBoard, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 May 2, 2024 (“Meade Deposition”), Exhibit 34, p. 20.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

schools to use.²⁶⁴ In 1972, the federal government introduced its own need analysis, the Pell Grant Methodology, for awarding Pell Grants to students.²⁶⁵ Congress enshrined into law a formula to determine students' EFC, based on student and parent income, student and parent assets, family size, the number of family members in college, and unusual expenses, like medical expenses.²⁶⁶

134. In 1974, the National Task Force on Student Aid Problems, also known as the Keppel Task Force, identified several deficiencies in the financial aid system, including the complexity faced by students and families, stemming from the existence of many different financial aid forms and formulas.²⁶⁷ The Keppel Task Force—which included representatives from the government, schools, CSS, and ACT (along with one of my predecessors as Dean of the HGSE)—recommended three improvements to the financial aid system: (1) to use a common need analysis methodology; (2) to use a common form to collect student financial data; and (3) to use a common calendar and timeline for making financial aid offers.²⁶⁸ The common need analysis methodology recommended by the Task Force was known as the Uniform Methodology (“UM”), which “incorporated the best aspects” of the various

²⁶⁴ “Need Analysis,” National Association of Independent Colleges and Universities, available at <https://www.naicu.edu/policy-advocacy/issue-brief-index/student-aid/needanalysis>, accessed December 7, 2023; “How the Federal Government Distributes Aid to Students,” Lumina Foundation & IHEP, available at <https://www.luminafoundation.org/files/resources/form-and-formula-viewing-guide.pdf>, accessed December 7, 2023, p. 4.

²⁶⁵ Dortch, Cassandra, “Federal Pell Grant Program of the Higher Education Act: Primer,” Congressional Research Service, 2021, available at <https://files.eric.ed.gov/fulltext/ED617516.pdf>, accessed May 1, 2024, pp. 1, 24.

²⁶⁶ Baum, “Exploring Ways to Enhance FAFSA Efficiency: The Federal Methodology: Is It a Good Measure of Ability to Contribute Toward Educational Expenses?,” Urban Institute and The National Association of Student Financial Aid Administrators, August 2020, available at https://www.nasfaa.org/uploads/documents/FAFSA_Series_Pt10_Federal_Methodology.pdf, accessed August 21, 2023, p. 4.

²⁶⁷ Kelly, Robert N., “The New Delivery System: A Voice for Caution,” Vol. 7, No. 1, 1977, p. 36.

²⁶⁸ Kelly (1977), pp. 36, 38-39; “How the Federal Government Distributes Aid to Students,” Lumina Foundation & IHEP, available at <https://www.luminafoundation.org/files/resources/form-and-formula-viewing-guide.pdf>, accessed December 7, 2023, p. 6.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

existing approaches into “a coherent whole.”²⁶⁹ The federal government endorsed the UM in 1986, when the government modeled the Congressional Methodology after the UM to distribute all federal aid other than Pell Grants (which continued to be distributed using the separate Pell Grant Methodology).²⁷⁰

135. In the early 1990s, the federal government replaced the Pell Grant Methodology and the Congressional Methodology with the Federal Methodology (“FM”), and required schools to use the FM to distribute federal aid to students. The FM’s most notable update was its removal of home equity from its EFC calculation, meaning its financial aid form, the FAFSA, would not collect this information.²⁷¹ Although home equity had previously been counted as an asset that could be borrowed against to fund college, it was removed in part because it is an illiquid asset, and the government did not want to create an expectation that families re-mortgage their houses to pay for college.²⁷² This decision also reflected the

²⁶⁹ “How the Federal Government Distributes Aid to Students,” Lumina Foundation & IHEP, available at <https://www.luminafoundation.org/files/resources/form-and-formula-viewing-guide.pdf>, accessed December 7, 2023, p. 6.

²⁷⁰ Clotfelter, Charles T., “Financial Aid and Public Policy,” in *Economic Challenges in Higher Education*, University of Chicago Press, 1991, pp. 95-96; Baum, “Exploring Ways to Enhance FAFSA Efficiency: The Federal Methodology: Is It a Good Measure of Ability to Contribute Toward Educational Expenses?,” Urban Institute and The National Association of Student Financial Aid Administrators, August 2020, available at https://www.nasfaa.org/uploads/documents/FAFSA_Series_Pt10_Federal_Methodology.pdf, accessed August 21, 2023, pp. 4-5; “How the Federal Government Distributes Aid to Students,” Lumina Foundation & IHEP, available at <https://www.luminafoundation.org/files/resources/form-and-formula-viewing-guide.pdf>, accessed December 7, 2023, p. 6.

²⁷¹ Baum, “Exploring Ways to Enhance FAFSA Efficiency: The Federal Methodology: Is It a Good Measure of Ability to Contribute Toward Educational Expenses?,” Urban Institute and The National Association of Student Financial Aid Administrators, August 2020, available at https://www.nasfaa.org/uploads/documents/FAFSA_Series_Pt10_Federal_Methodology.pdf, accessed August 21, 2023, p. 5.

²⁷² Baum, “Exploring Ways to Enhance FAFSA Efficiency: The Federal Methodology: Is It a Good Measure of Ability to Contribute Toward Educational Expenses?,” Urban Institute and The National Association of Student Financial Aid Administrators, August 2020, available at https://www.nasfaa.org/uploads/documents/FAFSA_Series_Pt10_Federal_Methodology.pdf, accessed August 21, 2023, p. 11; Baum, “A Primer on Economics for Financial Aid Professionals,” CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, p. 72.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

sense by some that home equity might be the main source of savings for a family, and thus should be treated more as a retirement asset than as a means of getting funds to pay for college. On the other hand, many financial aid professionals believed that by removing home equity, the FM ignored real differences in the financial stability of families who owned homes and that of families that did not.²⁷³ Given these differing views about the treatment of home equity, this decision was controversial.

136. Recognizing that the changes introduced by the FM “would require a significantly reduced set of financial data” and due to an expressed need “for an alternative methodology to assist schools in determining need for institutional and other nonfederal funds,”²⁷⁴ the College Board responded by developing an alternative need analysis methodology, the Institutional Methodology (“IM”), in 1993. The goal of the IM was to provide schools with a more complete understanding of a family’s financial situation.²⁷⁵ This involved collecting and evaluating more information than was required by the FM, such as home equity and financial information for all families, regardless of their income levels, so that schools

²⁷³ Baum, “Exploring Ways to Enhance FAFSA Efficiency: The Federal Methodology: Is It a Good Measure of Ability to Contribute Toward Educational Expenses?,” Urban Institute and The National Association of Student Financial Aid Administrators, August 2020, available at https://www.nasfaa.org/uploads/documents/FAFSA_Series_Pt10_Federal_Methodology.pdf, accessed August 21, 2023, p. 11.

²⁷⁴ CBD000001 (“2003-2004 School Year IM Users’ Guide,” The College Board, 2003) at 030 (“As it became apparent that FM would require a significantly reduced set of family financial data, a need was expressed for an alternative methodology to assist institutions in determining need for institutional and other nonfederal funds.”).

²⁷⁵ CBD000001 (“2003-2004 School Year IM Users’ Guide,” The College Board, 2003) at 029-030 (“[The IM was] designed to provide a comprehensive assessment of family income and asset strength.”).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

could evaluate both income and assets to assess financial need.²⁷⁶ The IM collected this information through a more detailed financial aid form: the CSS PROFILE.²⁷⁷

C. The 568 Group Provided a Valuable Forum for Schools to Discuss and Improve Equity and Transparency in Need Analysis

137. The introduction of the FM and IM in quick succession, at a time when some schools were moving away from need-based financial aid due to budgetary concerns, increased the need for schools to be able to discuss the impact of these methodologies on their respective students and existing financial aid policies.²⁷⁸ Building on prior efforts by schools, the federal government, and other organizations to improve need analysis methods, the 568 Group represented an institution-led effort by Defendants and their peers to reaffirm their existing commitments to the principles of need-based aid, as well as to refine common need analysis guidelines to improve transparency and equity among families, in line with their broader dedication to their long-standing missions of equitable and fair allocation of finite resources.

²⁷⁶ CBD000001 (“2003-2004 School Year IM Users’ Guide,” The College Board, 2003) at 029-030; Baum, “A Primer on Economics for Financial Aid Professionals,” CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, p. 70 (“Among those who apply for financial aid through the CSS/Financial Aid PROFILE, a significant portion of those at the low end of the income distribution have relatively high net worth, while many of those with high incomes do not have measurable assets.”).

²⁷⁷ CBD000001 (“2003-2004 School Year IM Users’ Guide,” The College Board, 2003) at 030.

²⁷⁸ For example, between 1986 and 1992, the percent of tuition at private schools covered by federal financial aid declined from 22 percent to 16 percent, increasing the burden on schools and/or students. McPherson, Michael S. and Morton O. Schapiro, “Financing Undergraduate Education: Designing National Policies,” *National Tax Journal*, Vol. 50, No. 3, 1997, p. 560. *See also* McPherson and Schapiro (1998), p. 17 (“But it is fair to say that the number of institutions following the ‘need-blind, full-need’ strategy—always a small number—has shrunk in the past decade and that most institutions have moved their financial aid operations from the direction of the [budget stretch approach] significantly toward the strategic maximization camp.”); COFHE-02-00009085 (“Materials for the Next Meeting on September 13,” 568 Presidents’ Working Group, September 3, 1999) at 091 (“Only a few (30-40) institutions still maintain positions that are fully need-based, all need-blind, and meet full need.”).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

138. On January 27, 1995, a set of representatives from certain need-blind schools met, where the discussion focused on the differences between the FM and the IM, questions on the novel CSS PROFILE, and concerns over “a proliferation of forms and a loss of faith among families in the validity of the [financial aid] system to collect information and deliver aid in an equitable fashion.”²⁷⁹ The increased burden on families due to multiple forms and the loss of faith in the financial aid system threatened each Defendants’ and their peers’ missions of increasing access for students—including proposed class members—as these barriers could disincentivize students, especially low-income students, from applying for admission or financial aid. This is consistent with my academic research on the barriers that low-income students face. Complexity and a perception that financial aid is not available have a detrimental effect on low-income students preparing and applying for college.²⁸⁰ Many of these debates continue to influence schools’ approaches to need analysis today. In my main graduate course at Harvard, I engage my students in discussions of the financial aid debates that were heightened during this period. Such debates centered on the need to more carefully consider how certain types of income and assets should be treated in need analysis methodologies, including the proper role of home equity and how the income and assets of divorced or separated parents should be considered.

139. Against this backdrop, the 568 Group was formed in 1998.²⁸¹ The 568 Group included not only Defendants, but also other need-blind private national universities and liberal arts colleges, such as Amherst College, Boston College, Grinnell College, Middlebury, and

²⁷⁹ COFHE-02-00013436 (“Institutional Need Analysis: An Uneasy Present An Uncertain Future,” Consortium on Financing Higher Education, 1995) at 439.

²⁸⁰ Bettinger et al. (2012), pp. 1206-1207; Avery et al. (2021), pp. 3-4, 6; Long (2010), p. 8. *See also* Long (2011).

²⁸¹ “What is the 568 Presidents Group?,” 568 Presidents Group, January 25, 2022, available at <https://web.archive.org/web/20220125094142/http://www.568group.org/home/>, accessed August 1, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Pomona.²⁸² The 568 Group also held meetings in which guests from other schools and organizations were invited for discussions and presentations, including Harvard, Stanford, the College Board, and NASFAA. These discussions and presentations touched on a range of topics, including income protection allowances, updates to the IM such as a new tax plan, COVID-related topics, and budget projects.²⁸³ These discussions were especially helpful for schools with smaller financial aid offices, such as Caltech, where there was less capacity to learn from past cases.²⁸⁴ As part of my professional activities, it was useful to me to stay informed about the 568 Group's discussions, as they reflected new approaches in response to a changing world and could have implications for college access and affordability for low-income students, the focal topic of my research.

140. Early discussions in the 568 Group revolved around the desire for a transparent and equitable need analysis approach. A 568 Group document from 1999, excerpted below in **Figure 7**, highlights concerns member schools had about how different need analysis methodologies could lead to very different estimates of a single family's ability to pay for higher education. The IM, FM, Princeton's institutional need analysis, Yale's institutional need analysis, and the College Board's proposed update to the IM in 2001-2002, each approached home equity and a family's investments differently, and they had different

²⁸² "568 Presidents Group Member Institutions," 568 Presidents Group, January 24, 2022, available at <https://web.archive.org/web/20220124014615/http://www.568group.org/home/?q=node/24>, accessed July 25, 2024.

²⁸³ DUKE568_0052762 ("Paying for College: Students from Middle-Income Backgrounds," The College Board, October 2016); ND_0014302 ("Income Protection Allowance for Retirement Part 3: The Conversation Continues," University of Notre Dame); DUKE568_0052947 ("Institutional Methodology and the New Tax Plan: 568 Presidents Group Meeting," Duke University, May 21, 2018); STANFORD_000847 ("Email with subject line 'RE: 568 Fall Mtgs'," October 8, 2020); CORNELL_LIT0000246894 ("568 Presidents Group Winter Meeting," Cornell University, January 26, 2016) (listing participants at a January 2016 meeting, including non-members such as Stanford, The College Board, and NASFAA); COLUMBIA_00060605 ("568 Presidents' Group Meeting," Columbia University, January 26, 2016).

²⁸⁴ Chang Deposition, 63:6-64:4.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

expectations for the student's contributions based on their summer earnings. Schools using these different need analysis methodologies would calculate different EFCs, such that they would expect a family to pay anywhere between \$9,050 and \$14,700. For some families, this 1.5x difference could lead to the perception that they were being treated unfairly. From the schools' perspectives, these different EFCs could indicate that some schools were systematically overlooking important elements of a student's financial circumstances.

Figure 7
Excerpt from a 568 Group Document Illustrating Different EFCs Resulting from Different
Need Analysis Methodologies²⁸⁵
September 1999

Example: Family of 4 from New York with one child going to college. Income = \$70,000, Home equity = \$70,000, Investments = \$80,000, Student savings = \$1,000.

	IM	FM	Princeton	Yale	Proposed IM
Parent Contr.					
-from income	7,000	7,000	7,000	7,000	5,780
-from assets	6,200	2,256	2,256	0	4,750
Total PC	13,200	9,256	9,256	7,000	10,530
Student Contr.					
-from savings	350	350	350	350	250
-from summer	1,150	0	1,810	1,700	1,150
Total FC	14,700	9,606	11,416	9,050	11,930

Note:

[1] Total Family Contribution ("FC") is equal to Total Parent Contribution ("PC") plus student contributions from savings and summer earnings.

141. During this time, the federal government was also a major participant in discussions of various approaches to need analysis. For example, Congress recognized the importance of engaging in discussion, research, and analysis to improve approaches to need analysis

²⁸⁵ COFHE-02-00009085 ("Materials for the Next Meeting on September 13," 568 Presidents' Working Group, September 3, 1999) at 092.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

methods and financial aid systems, as evidenced by the establishment of the Advisory Committee on Student Financial Assistance in 2001.²⁸⁶ Further, Congress acknowledged the benefits of discussions among the 568 Group members to “ensure that students in need of financial aid are treated fairly and consistently,” when it unanimously passed the extension of the 568 antitrust exemption in 2015.²⁸⁷

142. Similarly, the College Board has long collaborated with schools to perform careful analysis and to evaluate emerging economic trends. For example, after “several years of discussion, research, and analysis,” the College Board’s Financial Aid Standards and Services Advisory Committee (“FASSAC”) made “several significant changes” to the IM to introduce a “new” IM for the 2001-2002 academic year that “reflect[ed] contemporary economic circumstances.”²⁸⁸ For example, the IM updated its income and asset assessment rates,²⁸⁹ updated the way it treated siblings in college to reduce concerns of horizontal inequity,²⁹⁰ and removed a retirement allowance in recognition that families were

²⁸⁶ One of the main purposes of the advisory committee was “to provide technical expertise with regard to systems of needs analysis and application forms.” Advisory Committee on Student Financial Assistance, 20 U.S.C. § 1098 (2001).

²⁸⁷ “Congress Passes Bill Allowing Universities to Collaborate on Financial Aid Best Practices,” Chuck Grassley, July 29, 2015, available at <https://www.grassley.senate.gov/news/news-releases/congress-passes-bill-allowing-universities-collaborate-financial-aid-best>, accessed July 25, 2024.

²⁸⁸ CBD000001 (“2003-2004 School Year IM Users’ Guide,” The College Board, 2003) at 031.

²⁸⁹ CBD000001 (“2003-2004 School Year IM Users’ Guide,” The College Board, 2003) at 031 (“The ‘new’ IM reflects contemporary economic circumstances, recognizes and encourages families’ educational savings efforts, and incorporates more modest income and asset assessment rates.”).

²⁹⁰ Baum, “A Primer on Economics for Financial Aid Professionals,” CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, pp. 58-59.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

increasingly using formal retirement savings accounts, which were already protected from need analysis methodologies.²⁹¹

143. These discussions benefited students in multiple ways and enhanced equity in need analysis processes. For example, the 2001 refinement of the IM led to schools reporting fewer appeals in the first year following implementation, suggesting that these updates led to a more equitable and efficient allocation of institutional aid that aligned with families' expectations.²⁹²

144. The 568 Group thus represented an institution-led effort by Defendants and some of their peers to reaffirm their existing commitments to the principles of need-based aid, as well as to refine common need analysis guidelines to improve transparency and equity among families.

D. The 568 Group Developed Recommended Best Practices for Need Analysis that Benefited Students

145. The 568 Group focused its efforts on developing best practices for need analysis, focusing on specific elements that needed "to be addressed if fairness and equity across institutions [were] to be recognized."²⁹³ The 568 Group's recommendations and discussions were documented in the CM Guidelines, which were circulated to members and updated over time to reflect additional discussion and information as it became available. By December 2016, the latest date for which finalized CM Guidelines were produced in this matter, the

²⁹¹ Baum, "A Primer on Economics for Financial Aid Professionals," CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, pp. 83–85.

²⁹² CBD000001 ("2003-2004 School Year IM Users' Guide," The College Board, 2003) at 031.

²⁹³ COFHE-02-00009085 ("Materials for the Next Meeting on September 13," 568 Presidents' Working Group, September 3, 1999) at 093.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

CM Guidelines discussed the treatment of 17 elements used in need analysis for domestic students.²⁹⁴

146. Often, the CM Guidelines highlighted financial burdens faced by families that were not adequately accounted for by the IM. In these cases, the CM Guidelines recommended modifications to better estimate the needs of students, which acknowledged the need for more aid than what the IM suggested. As described in the CM Guidelines, “[i]n developing its policy guidelines, the 568 Group has focused on arriving at the ‘right’ approach to determining parental ability to pay without regard to potential cost implications. For many families, especially middle-income families, the methodology has the effect of reducing the expected family contribution.”²⁹⁵ The 568 Group therefore anticipated that the CM Guidelines would “reduce expected parent contributions in the aggregate.”²⁹⁶ Although the effect of the CM Guidelines’ recommendations on a student’s EFC depended on the student’s and their family’s individualized financial circumstances, there were several

²⁹⁴ NULIT-0000000348 (“568 Presidents’ Group: Consensus Methodology Policy Guidelines,” 568 Presidents’ Group, 2016). In addition to the CM Guidelines dated December 2016, I have also identified three final drafts dated June 2001, 2004-2005, November 2015; *see* UCHICAGO_0000183661 (“Report of The Common Standards Subcommittee to The 568 Presidents’ Working Group,” 568 Presidents’ Working Group, June 1, 2001); NULIT-0000161662 (“Consensus Methodology Policy Guidelines Manual,” The 568 Presidents’ Group, 2004); DARTMOUTH_0000152041 (“The 568 Presidents’ Group Consensus Methodology Policy Guidelines,” The 568 Presidents’ Group, November 2015); DARTMOUTH_0000091786 (“The 568 Presidents’ Group Consensus Methodology Policy Guidelines,” The 568 Presidents’ Group, December 2016); as well as drafts dated November 2010, November 2012, January 2013, October 2014, and March 2019; *see* Emory_568Lit_0000224 (“The 568 Presidents’ Group Consensus Methodology Policy Guidelines,” The 568 Presidents’ Group, November 2010); MIDDLEBURY003665 (“The 568 Presidents’ Group Consensus Methodology Policy Guidelines,” The 568 Presidents’ Group, November 2012); GTWNU_0000006237 (“The 568 Presidents’ Group Consensus Methodology Policy Guidelines,” The 568 Presidents’ Group, January 2013); GTWNU_0000141656 (“The 568 Presidents’ Group Consensus Methodology Policy Guidelines,” The 568 Presidents’ Group, October 2014); MITLIT-000006825 (“The 568 Presidents’ Group Consensus Methodology Policy Guidelines,” The 568 Presidents’ Group, December 2016); *see also* **Appendix D**.

²⁹⁵ NULIT-0000000348 (“568 Presidents’ Group: Consensus Methodology Policy Guidelines,” 568 Presidents’ Group, 2016) at 351.

²⁹⁶ NULIT-0000000348 (“568 Presidents’ Group: Consensus Methodology Policy Guidelines,” 568 Presidents’ Group, 2016) at 352.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

recommendations in the CM Guidelines that would more commonly lower students' EFCs. Below, I describe some of the recommendations that benefited students and could lead to more financial aid, which is inconsistent with a coordinated effort to suppress institutional grant aid as alleged by Dr. Singer.

1. Cost-of-Living Adjustments

147. Throughout the Class Period, the IM provided families with an Income Protection Allowance ("IPA") and an Emergency Reserve Allowance ("ERA") that reduced the amount of income and assets, respectively, that could be assessed to pay for higher education.²⁹⁷ Financial aid officers debated whether and how these allowances should account for differences in the cost of living in different areas of the country since at least 1995.²⁹⁸ Failing to account for differences in the cost of living could lead to horizontal inequity, with families in similar economic circumstances being treated differently. However, as discussed above in **Section III.A.1**, there were numerous difficulties in implementing such an adjustment in practice, including identifying which areas of the country should receive an adjustment and developing an appropriate method to distinguish differences in cost of living from differences in standard of living associated with different areas.²⁹⁹

²⁹⁷ CBD000001 ("2003-2004 School Year IM Users' Guide," The College Board, 2003) at 044-045; NULIT-0000181680 ("Institutional Methodology User Guide," CollegeBoard, July 15, 2022) at 694, 697.

²⁹⁸ COFHE-02-00013416 ("Recent Meeting of the Group, Aid Directors at Section 568 Signatory Institutions," Consortium on Financing Higher Education, December 11, 1995) at 422.

²⁹⁹ NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016) at 355-356; COFHE-02-00013416 ("Recent Meeting of the Group, Aid Directors at Section 568 Signatory Institutions," Consortium on Financing Higher Education, December 11, 1995) at 422; Baum, "A Primer on Economics for Financial Aid Professionals," CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, pp. 66-67.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

148. As of 2001, the 568 Group and the College Board brought together economic expertise and institutional experiences to develop cost-of-living tables that would address these concerns, while providing families in high cost-of-living areas with additional allowances against their income and assets.³⁰⁰ In an example referenced in the financial aid community, the cost of living in Manhattan, New York is substantially higher than in Manhattan, Kansas.³⁰¹ Therefore, a family in Manhattan, New York would likely receive a higher IPA and ERA from schools using the cost-of-living tables developed by the 568 Group and the College Board, resulting in a lower EFC, higher eligibility for need-based aid, and a more equitable aid determination.
149. By 2003, the College Board had incorporated these tables into the options available for the IM, giving any school that used the IM the ability to more accurately and equitably calculate need for students and families living in high-cost areas by increasing the IPA and ERA.³⁰² Indeed, many schools chose to use the tables: according to a 2019 survey, of the

³⁰⁰ UCHICAGO_0000183661 (“Report of The Common Standards Subcommittee to The 568 Presidents’ Working Group,” 568 Presidents’ Working Group, June 1, 2001) at 670, 682-684 (“We believe that this issue requires collaboration with CSS’s Financial Aid Standards and Services Advisory Committee. That group has begun work on the cost-of-living issue and we look forward to lending out support to their on-going efforts in this regard. Given the complexity of the issue and the amount of time that it will take to come to resolution, it is appropriate to expand the number working on the problem.” Additionally, the Common Standards Subcommittee discussed the careful economic analysis and iteration needed to evaluate the cost-of-living issue: “Our initial concern with the CES data was based on the fact that it gives information on expenditures and not the cost of a fixed market basket of goods. [...] A subsequent review of the CES data focused on the component that describes the cost of housing. [...] In addition to developing a cost of living table based on differential housing costs, we examined its impact when applied against the entire Income Protection Allowance (IPA) and against only the housing component of the IPA.”).

³⁰¹ UCHICAGO_0000183661 (“Report of The Common Standards Subcommittee to The 568 Presidents’ Working Group,” 568 Presidents’ Working Group, June 1, 2001) at 670; Baum, “A Primer on Economics for Financial Aid Professionals,” CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, p. 52.

³⁰² CBD000001 (“2003-2004 School Year IM Users’ Guide,” The College Board, 2003) at 190. For the 568 Group’s recommended cost-of-living adjustments made in 2001, see UCHICAGO_0000183661 (“Report of The Common Standards Subcommittee to The 568 Presidents’ Working Group,” 568 Presidents’ Working Group, June 1, 2001) at 684.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

■ schools using the CSS PROFILE for their domestic undergraduate students, ■ (■ percent) respondents used the cost-of-living adjustment factor.³⁰³ The College Board estimated that adjusting the IPA and ERA for cost-of-living differences across regions would decrease the expected parent contribution for ■ percent of families that filed the CSS PROFILE for 2022-2023 with a parent contribution of ■ for less, with a median decrease of \$ ■. Students at both Defendant schools and non-Defendant schools thus benefited from the 568 Group's work to develop a better and more equitable way to account for the expenses families face and increase their eligibility for need-based financial aid.

2. *The Treatment of Home Equity*

150. While the College Board had incorporated the option for schools to include home equity into its IM before the development of the CM Guidelines, the debate over the treatment of home equity was still ongoing. The College Board continued to update the treatment of home equity in the IM over time, reflecting broader concerns in the financial aid community related to this element. Consistent with these ongoing adjustments, the 568 Group identified home equity as a priority area for discussion prior to developing the initial CM Guidelines. Materials circulated ahead of a 568 Group meeting in September 1999 noted that “[h]ow to treat the non-liquid asset of the family home present[ed] special problems.”³⁰⁵

³⁰³ CBD008556 (“Setting Your CSS Profile & IDOC Service Options: What’s New and Trending,” CollegeBoard, August 8, 2019) at 566, 579.

³⁰⁴ NULIT-0000181680 (“Institutional Methodology User Guide,” CollegeBoard, July 15, 2022) at 722, 737.

³⁰⁵ COFHE-02-00009085 (“Materials for the Next Meeting on September 13,” 568 Presidents’ Working Group, September 3, 1999) at 093.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

151. Throughout the Class Period, the IM's default settings considered the full amount of home equity as an asset when calculating parents' net worth.³⁰⁶ However, this treatment might artificially inflate a family's perceived financial strength where inflation in housing prices resulted in home values that "have grown beyond the family's ability to repurchase the home."³⁰⁷ Since 2005, the College Board has therefore given schools the flexibility within the IM, through the use of its "service options," to easily cap the amount of home equity included in the calculation of parents' net worth by a multiple of parents' income.³⁰⁸ A cap would reduce the amount of home equity treated as an asset for the purpose of need analysis for certain students, thus reducing the calculated EFC relative to a calculation without a cap. The College Board recommended that schools interested in this option cap home equity at two times the parents' annual income.³⁰⁹ So, if a family had home equity worth \$300,000 and annual income of \$100,000, a 2x income cap would only allow \$200,000 of their home equity to be considered for purposes of the need analysis.
152. However, the 568 Group still concluded that the College Board's recommended cap did not adequately account for other attributes of home equity, including "the fact that home equity is an asset that is less liquid than other forms of assets and less readily available for

³⁰⁶ CBD000001 ("2003-2004 School Year IM Users' Guide," The College Board, 2003) at 048, 054; NULIT-0000181680 ("Institutional Methodology User Guide," CollegeBoard, July 15, 2022) at 731; *see also*, VANDERBILT-00272944 ("Profile Users Guide," CollegeBoard, October 2013) at 994.

³⁰⁷ NULIT-0000181680 ("Institutional Methodology User Guide," CollegeBoard, July 15, 2022) at 731.

³⁰⁸ Beginning in the 2005-2006 award year, the IM provided schools with a discrete option to cap home equity at two times the parents' income. In later years, the IM allowed schools to enter their own cap on home equity but continued to recommend capping home equity at two times the parents' income. In prior years, the IM provided schools with a discrete option to cap home value at three or 2.4 times the parents' income. *See, for example*, CBD000546 ("CSS/Financial Aid Profile User's Guide," CollegeBoard, 2005-2006) at 586 ("instead of an option that caps home value at 3 or 2.4x parent income, the new PROFILE option will cap home equity at 2 x parent income.").

³⁰⁹ NULIT-0000181680 ("Institutional Methodology User Guide," CollegeBoard, July 15, 2022) at 731.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

financing education expenses” and the fact that home equity is a “consumption good” in addition to an investment good; that is, a family’s home serves as its place of living and, as a result, its value is not limited to its investment and financial worth.³¹⁰ The 568 Group therefore recommended that schools apply a *lower cap*, equal to 1.2 times parents’ annual income, on the amount of home equity used as an asset for the purpose of calculating an EFC.³¹¹ Using the above example of a family with home equity worth \$300,000 and an annual income of \$100,000, only \$120,000 of the home equity would be considered under the CM Guidelines’ approach, further reducing EFCs for families in comparison to the cap recommended by the IM.

153. By limiting the extent to which home equity is considered in need analysis even more than in the IM, the 568 Group’s recommendation worked in favor of students. This beneficial effect for students was documented by the College Board, which estimated that for the academic year 2022-2023, capping home equity at 1.2 times parents’ annual income decreased the parent contribution for ■ percent of families that filed the CSS PROFILE relative to the IM’s default approach of not capping home equity, with a median decrease of \$■.³¹² Put simply, all else equal, the 568 Group’s recommended approach to home equity served to decrease the amount a family with home equity dramatically greater than income would be expected to contribute towards a student’s college costs.

³¹⁰ COFHE-02-00002603 (“Report of the Common Standards Subcommittee to the 568 Presidents’ Working Group,” Consortium on Financing Higher Education, June 2001) at 613.

³¹¹ DARTMOUTH_0000359371 (“Membership Dues in Support of The 568 Presidents’ Group for FY 2006 and 2007,” 568 Presidents’ Group, November 28, 2005) at 375. In prior years, the 568 Group recommended to cap home value at 2.4 times income, a lower cap than the College Board recommendation at the time. *See, for example*, COFHE-02-00002603 (“Report of the Common Standards Subcommittee to the 568 Presidents’ Working Group,” Consortium on Financing Higher Education, June 2001) at 612-613.

³¹² NULIT-0000181680 (“Institutional Methodology User Guide,” CollegeBoard, July 15, 2022) at 733.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

3. *The Treatment of Family and Student Assets*

154. By default, the IM differentiates between parent and student assets in its EFC calculation.

Because parents have other expenses they need to cover with their assets, including living expenses for themselves and other family members, only five percent of parental assets are included in the calculated parent contribution. Meanwhile, students are expected to prioritize paying for their education and, thus, to contribute up to 25 percent of their assets.³¹³ The question of which assets are considered parental assets versus student assets can have a large impact on calculated EFCs. The 568 Group noted that problems can arise with “assets that may have been put in the name of the student/sibling for tax purposes by the parent,” but which “are assessed at the higher student rate.”³¹⁴ In other words, some of a parent’s assets could be put in the name of the student and would be assessed at the student rate of 25 percent rather than the parental rate of five percent.

155. To address this problem, early CM Guidelines, in contrast to the default IM treatment, recommended that assets in the student’s name be treated as parent assets and assessed at a lower rate while noting that schools generally will (and should) apply professional judgment to determine the treatment of student trust funds and other large student assets.³¹⁵ If, for example, a student had \$5,000 in savings from working a summer job, under the early CM Guidelines, the student and their family would be expected to contribute only

³¹³ Baum, “A Primer on Economics for Financial Aid Professionals,” CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, p. 74.

³¹⁴ COFHE-02-00009085 (“Materials for the Next Meeting on September 13,” 568 Presidents’ Working Group, September 3, 1999) at 093.

³¹⁵ NULIT-0000161662 (“Consensus Methodology Policy Guidelines Manual,” The 568 Presidents’ Group, 2004) at 669-670.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

\$250 (five percent) of those savings toward their college costs, as opposed to \$1,250 (25 percent) under the default IM treatment of these assets.

156. The early CM Guidelines' recommendation to assess a broader range of student assets at the lower parental rate benefited students by reducing EFCs relative to the IM's default treatment of these assets.

4. *Retirement Allowances*

157. As early as 1999, the 568 Group identified retirement assets as “an extraordinarily complex area,” both because it is difficult to accurately determine the value of retirement assets and because data on these assets are not consistently collected.³¹⁶
158. Historically, need analysis methodologies such as the UM, Congressional Methodology, FM, and IM excluded formal retirement savings accounts from their tabulation of parents' assets.³¹⁷ These methodologies also included an Asset Protection Allowance (“APA”) to protect a portion of families' income for retirement, regardless of whether they had formal retirement savings accounts.³¹⁸ In 2000, however, as formal retirement savings accounts became more common, the College Board removed the APA from the IM.³¹⁹ The 568 Group recognized that it would still be appropriate to separately protect a portion of assets

³¹⁶ COFHE-02-00009085 (“Materials for the Next Meeting on September 13,” 568 Presidents' Working Group, September 3, 1999) at 093.

³¹⁷ Baum, “A Primer on Economics for Financial Aid Professionals,” CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, p. 83.

³¹⁸ Baum, “A Primer on Economics for Financial Aid Professionals,” CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, p. 83.

³¹⁹ Baum, “A Primer on Economics for Financial Aid Professionals,” CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, pp. 83–85. The FM still applies an Asset Protection Allowance.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

for families without other, formal retirement savings, benefitting these applicants by reducing the assets considered in the EFC calculation.

159. In response to concerns about the way retirement savings were counted for some families (e.g., families that used IRAs to save for retirement) but not others (e.g., families that relied on home equity to save for retirement), the 568 Group's Technical Committee was tasked with developing an equitable approach to retirement allowances.³²⁰ Through conversations with the College Board and the Center for Retirement Research at Boston College, the committee developed two preliminary tools: the Retirement Savings Allowance ("RSA") tool and the Retirement Readiness Evaluation Tool ("RRET").³²¹ The goal of these tools was to help financial aid professionals determine if an additional retirement allowance against income was appropriate given the family's financial strength and, if so, how big that allowance should be.³²² The RSA and RRET rely on supplementary applicant information on parents' retirement contributions and benefits, as well as residential mortgage information.³²³
160. The Technical Committee first distributed the RSA to 568 Group members in March 2019 for a trial period.³²⁴ The response of 568 Group members varied. A member survey found

³²⁰ NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016) at 358.

³²¹ DARTMOUTH_0000091496 ("Retirement Savings Allowance Pilot Project," 568 Presidents' Group) at 498; CALTECH000001583 ("Email with subject line 'Fw: Reminder -Retirement Allowance Tools'," June 4, 2019) at 583; NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016) at 358.

³²² CALTECH000001583 ("Email with subject line 'Fw: Reminder -Retirement Allowance Tools'," June 4, 2019) at 583.

³²³ DARTMOUTH_0000091496 ("Retirement Savings Allowance Pilot Project," 568 Presidents' Group) at 503.

³²⁴ CALTECH000001583 ("Email with subject line 'Fw: Reminder -Retirement Allowance Tools'," June 4, 2019) at 583.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

that nine out of 20 member schools used the RRET and/or the RSA for the 2019-2020 award cycle for new and returning students.³²⁵ For example, MIT's representatives opted to try the new tool only "when reviewing first-year student appeals," and ultimately chose not to roll the tool out to all financial aid staff until they could "identify best practices for when to use it."³²⁶ As another example, Notre Dame concluded in its 2021/2022 Policy & Procedure Manual that "[i]n alignment with the 568 Group Professional Judgment policy [...] it is appropriate in some circumstances to provide retirement protection to those for whom Social Security is the only significant source of retirement and/or whose retirement savings are insufficient."³²⁷ However, rather than use the spreadsheet tools developed by the 568 Group to identify whether a family's retirement savings were "insufficient," Notre Dame chose to follow "common sense guidance provided by the College Board" in 2019.³²⁸ For families deemed to have insufficient retirement savings under the College Board's guidance, Notre Dame used the 568 Group's RSA tool to calculate the appropriate amount of the allowance.³²⁹

161. All else being equal, using the 568 Group's RSA tool to make an allowance for families without formal retirement savings would tend to result in a lower EFC for eligible families

³²⁵ ND_0000624 ("2019-20 568 RRET and RSA SURVEY Results, Observations and Recommendations," University of Notre Dame, 2019-2020) at 625.

³²⁶ MITLIT-000009988 ("Email with subject line 'FW: Reminder -Retirement Allowance Tools'," March 28, 2019) at 988.

³²⁷ ND_0080248 ("2021/2022 Retirement Savings Allowance (RSA)," University of Notre Dame, 2021-2022) at 248.

³²⁸ ND_0080248 ("2021/2022 Retirement Savings Allowance (RSA)," University of Notre Dame, 2021-2022) at 249.

³²⁹ ND_0080248 ("2021/2022 Retirement Savings Allowance (RSA)," University of Notre Dame, 2021-2022) at 251.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

than would otherwise be calculated under the IM, which did not provide for such an allowance.³³⁰

IV. EACH DEFENDANT SEPARATELY DETERMINED EFCS AND INSTITUTIONAL GRANT AID FOR ITS OWN STUDENTS, REFLECTING ITS OWN NEED ANALYSIS METHODOLOGY, APPLICATION OF PROFESSIONAL JUDGMENT, AND PACKAGING POLICY

162. Dr. Singer asserts that the 568 Group had the “goal of suppressing [need-based] institutional grant aid” and, to that end, purports to frame the 568 Group’s efforts to improve need analysis as a form of price-fixing in which Defendants agreed on key aspects of their need analysis methodologies to “establish a floor for EFCs.”³³¹ Dr. Singer alleges that Defendants accomplished this by: (1) “using the [IM] as the ‘base’ method for need analysis and as the starting point for calculating financial aid”; (2) “developing and implementing the [CM] as a variation of the IM for purposes of need analysis”; and (3) “using a common manual for applying ‘professional judgment’ to determinations of need, and treating professional judgment as the exception rather than the rule.”³³²
163. As discussed in **Section III.D**, many of the recommendations in the CM Guidelines would, in fact, *decrease* EFCs relative to baseline treatment in the IM for impacted students, which is inconsistent with an attempt to suppress need-based institutional grant aid. Further, while the 568 Group made recommendations regarding the treatment of certain elements in need

³³⁰ The 568 Group distributed preliminary tools to assess retirement allowances in 2019. However, the most recent CM Guidelines are from 2016. The 568 Group did not move to formally add this tool to the CM Guidelines before the 568 Group dissolved in 2022. *See* CALTECH000001583 (“Email with subject line ‘Fw: Reminder - Retirement Allowance Tools’,” June 4, 2019) at 583; NULIT-0000000348 (“568 Presidents’ Group: Consensus Methodology Policy Guidelines,” 568 Presidents’ Group, 2016).

³³¹ Singer Report, ¶¶ 3, 126.

³³² Singer Report, ¶ 4.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

analysis methodologies (as documented in the CM Guidelines) and adapted existing industry guidance on professional judgment practices (as documented in the PJ Guidelines), my analysis of documentary evidence demonstrates that each Defendant continued to independently determine and apply its own institutional need analysis methodologies.

164. It is not surprising that each Defendant developed and applied individualized methodologies, as most elements of need analysis either were not addressed at all in the CM Guidelines or were addressed incompletely through imprecise recommendations that left substantial room for schools to take varying approaches. Even when the CM Guidelines outlined a specific recommendation for the treatment of a particular element, each Defendant separately determined how to treat that element in its own need analysis methodology. Often, Defendants chose different treatments for these elements that were inconsistent with the CM Guidelines' recommendations, and these differences could either increase or decrease EFCs relative to the recommended treatment in the CM Guidelines.
165. Given the individualized ways each Defendant approached need analysis, including in ways that *decreased* EFCs relative to the CM Guidelines, Dr. Singer has not demonstrated that the Challenged Conduct created a "floor" on EFCs. Further, the Challenged Conduct and the CM Guidelines are unrelated to how each Defendant packages its financial aid offers, which is a key determining factor for the amount of need-based institutional grant aid a student is offered. In fact, Defendants *increased* the share of aid awarded through institutional grant aid during the Class Period.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

A. The CM Guidelines Did Not Limit Each Defendant's Ability to Separately Determine Its Own EFC Estimates

166. As Dr. Singer recognizes in his report, without “agreement [...] on at least many components of an IM [...] the schools could [...] appl[y] different methodologies generating different results.”³³³ Indeed, my analysis of the CM Guidelines finds that they discussed only 17 specific elements used in need analysis and provided actionable recommendations for only some of these elements. Therefore, even if Defendants’ need analysis methodologies were consistent with the recommendations in the CM Guidelines for the actionable elements—which, as I discuss in **Section IV.B**, is not the case—there would necessarily be substantial independent judgment underlying Defendants’ individualized need analysis methodologies and resulting EFC calculations.
167. As discussed in **Section III.D**, the 568 Group focused its attention on 17 specific elements used in need analysis that it had determined were “most often subject to local interpretation or professional judgment,” suggesting that schools were dissatisfied with the then-current treatment (if any) of these nuanced elements in common need analysis methodologies, such as the IM.³³⁴ However, recommendations on these 17 elements could not be used by themselves to calculate an EFC because need analysis requires “the examination of many dozens of elements to measure a family’s ability to pay.”³³⁵ Therefore, the CM Guidelines could only be used in conjunction with a broader need analysis methodology, such as a

³³³ Singer Report, ¶ 128.

³³⁴ NULIT-0000000348 (“568 Presidents’ Group: Consensus Methodology Policy Guidelines,” 568 Presidents’ Group, 2016) at 352; DARTMOUTH_0000082053 (“A Response to the Draft Report on the Activities of the 568 Report,” 568 Presidents’ Group, September 5, 2006) at 059.

³³⁵ NULIT-0000000348 (“568 Presidents’ Group: Consensus Methodology Policy Guidelines,” 568 Presidents’ Group, 2016) at 350.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

methodology based on the IM or the FM (discussed in **Section III.B**), that would inform how the school evaluated elements not discussed in the CM Guidelines.

168. Schools have substantial flexibility to modify the IM and the FM for the purpose of awarding their own institutional aid. Although use of the FM is subject to strict regulations for the purpose of awarding federally funded financial aid such as Pell Grants, schools are free to modify the FM formula for the purpose of awarding their own institutional financial aid. For example, until 2013, Johns Hopkins used a modified version of the FM, which it referred to as the “Smart FM,” to award its institutional financial aid. According to Thomas McDermott, Associate Vice Provost for Financial Aid at Johns Hopkins, the Smart FM was based on the FM but differed in several ways, including its consideration of home equity and noncustodial parents.³³⁶ Similarly, the College Board provides schools with substantial flexibility to modify the baseline IM EFC calculation “to reflect their mission and goals.”³³⁷ Schools can modify settings in their Institutional Portal that controlled various elements of the IM EFC calculation which could either increase or decrease EFCs.³³⁸ The College Board also gives schools the flexibility to add supplemental questions to the CSS PROFILE, allowing them to obtain information about a family’s financial circumstances that was not covered by the standard CSS PROFILE questions (or the FAFSA), which schools can then incorporate into their need analysis calculations.³³⁹ Schools can then download students’ financial aid data from the College Board into their own Financial Aid

³³⁶ Deposition of Thomas McDermott, Associate Vice Provost for Financial Aid at Johns Hopkins University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 August 18, 2023 (“McDermott Deposition”), 24:17-25:9.

³³⁷ NULIT-0000181680 (“Institutional Methodology User Guide,” CollegeBoard, July 15, 2022) at 721.

³³⁸ VANDERBILT-00272944 (“Profile Users Guide,” CollegeBoard, October 2013) at 970, 971.

³³⁹ VANDERBILT-00272944 (“Profile Users Guide,” CollegeBoard, October 2013) at 952.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Management System software, where they can further adjust the calculation of students' EFCs.³⁴⁰

169. Even for the 17 elements of need analysis discussed in the CM Guidelines, the 568 Group's recommendations were often incomplete or left room for different treatments and professional judgment. As I discuss in more detail in **Section IV.B**, my analysis of the CM Guidelines and available documentation identified only eight elements with actionable recommendations such that I could assess whether each Defendant's methodology was consistent with the CM Guidelines. For elements without actionable recommendations, each Defendant had to individually determine its own approach, which may have been informed by its interpretation of the CM Guidelines, the treatment of that element in the FM or IM, or its own school-specific priorities and needs.
170. For example, the CM Guidelines provided minimal direction on the treatment of parent-owned businesses. While the CM Guidelines noted that it was "the sense of most financial aid professionals that self-employed families generally have greater financial strength than wage earning families with the same AGI"—and that this relative strength was not adequately adjusted for by the CM Guidelines' recommended treatment of business income and losses—the 568 Group did not "attempt[]" to develop a recommendation to address this discrepancy in financial strength.³⁴¹ Instead, the CM Guidelines suggested that it *could*

³⁴⁰ VANDERBILT-00272944 ("Profile Users Guide," CollegeBoard, October 2013) at 952.

³⁴¹ NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016) at 362.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

be appropriate to apply professional judgment based on “reviewing tax returns for Corporation/Partnerships and Schedule C, E, and F enterprises.”³⁴²

171. For other elements, the CM Guidelines provided a recommendation that left vast room for interpretation or variation in application. For example, in the case of divorced, separated, or single parents, the CM Guidelines recommended that schools collect information about the income and assets of all parents, including the custodial parent, the noncustodial parent, and their spouses. However, it did not provide an actionable recommendation for which parents should be expected to contribute towards a student’s education or how to determine the contribution from each parent.³⁴³ Defendants therefore took a variety of approaches to calculating EFCs for students with divorced, separated, or single parents:

- [REDACTED]
[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
[REDACTED]³⁴⁴
- MIT generally expected a contribution from both the custodial and noncustodial parents based on a full need analysis of each parent’s information.³⁴⁵
- [REDACTED]
[REDACTED]

³⁴² NULIT-0000000348 (“568 Presidents’ Group: Consensus Methodology Policy Guidelines,” 568 Presidents’ Group, 2016) at 362.

³⁴³ NULIT-0000000348 (“568 Presidents’ Group: Consensus Methodology Policy Guidelines,” 568 Presidents’ Group, 2016) at 353. The 568 Group’s recommended method for calculating noncustodial parent contributions, and for accounting for the income and assets of spouses, was described in the PJ Guidelines. However, as discussed in **Section IV.D** below, professional judgment was always to be applied on a case-by-case basis. In addition, the PJ Guidelines noted “that there may be problems trying to apply the [...] general procedures” to each student and therefore recommended that they “be used when appropriate.” NULIT-0000018769 (“568 Presidents’ Group: Professional Judgment Guidelines Manual,” 568 Presidents’ Group, 2016) at 771-775.

³⁴⁴ Backup materials to this report (Appendix D).

³⁴⁵ Backup materials to this report (Appendix D).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- [REDACTED]
- Georgetown separately calculated an EFC based on the custodial household (including the custodial parent's spouse, if any) and an EFC based on the custodial and non-custodial parents, then used whichever EFC was higher.³⁴⁸

172. Similarly, the CM Guidelines provided incomplete recommendations for how to treat changes in employment (e.g., sudden unemployment). The CM Guidelines recommended that “[a]nticipated year income can be used when there has been an interruption or change in employment that has caused a significant reduction in household income.”³⁴⁹ However, they did not provide a recommendation for how to determine when a reduction in household income is “significant,” nor did they provide specific guidance on how to calculate anticipated year income other than noting that “it should be assumed that the parent will be reemployed at a reduced rate from his or her previous salary.”³⁵⁰ Schools used different approaches to estimate anticipated year income, such as assuming the parent

³⁴⁶ Backup materials to this report (Appendix D); CALTECH000013902 (“Verification and Needs Analysis Manual 2020-2021,” California Institute of Technology, 2020-2021) at 935-937.

³⁴⁷ Backup materials to this report (Appendix D); Emory_568Lit_0007286 (“Chapter 5 File Review and Verification,” Emory University, 2015) at 305.

³⁴⁸ Backup materials to this report (Appendix D).

³⁴⁹ NULIT-0000000348 (“568 Presidents’ Group: Consensus Methodology Policy Guidelines,” 568 Presidents’ Group, 2016) at 362.

³⁵⁰ NULIT-0000000348 (“568 Presidents’ Group: Consensus Methodology Policy Guidelines,” 568 Presidents’ Group, 2016) at 362.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

would be re-employed at 80 percent of their previous income (Penn) or 60 percent of their previous income (Cornell).³⁵¹

173. Finally, I note that regardless of how a school's need analysis methodology treated a particular element, financial aid professionals could apply professional judgment to account for an individual student's specific circumstances. As one example, even though the CM Guidelines recommended that schools not allow losses on rental properties to reduce parental income, the corresponding PJ Guidelines acknowledged that it may sometimes be appropriate to account for such losses, such as when a rental property is unoccupied for an extended period of time while the family incurs expenses like mortgage payments, taxes, and utilities.³⁵² I discuss the role of professional judgment in detail in **Section IV.D.**

B. Defendants' Need Analysis Methodologies Routinely Diverged from the Recommended Approaches in the CM Guidelines

174. Dr. Singer alleges as part of the Challenged Conduct that Defendants had an "agreement on" "developing and implementing the CM as a variation [of] the IM for purposes of need analysis."³⁵³ Dr. Singer asserts that "Defendants regularly described themselves as following the [...] CM."³⁵⁴ To support this point, Dr. Singer simply cites to a handful of Defendant documents indicating that their need analysis methodologies were aligned with

³⁵¹ Backup materials to this report (Appendix D); PENN568-LIT-00163047 ("Need Analysis," University of Pennsylvania, 2005) at 056; CORNELL_LIT0000269951 ("Financial Aid Application Review Procedures 2012-2013," Cornell University) at 969.

³⁵² NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016) at 354; NULIT-0000018769 ("568 Presidents' Group: Professional Judgment Guidelines Manual," 568 Presidents' Group, 2016) at 786.

³⁵³ Singer Report, ¶ 148.

³⁵⁴ Singer Report, ¶ 157.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

the CM or that they “applied” the CM.³⁵⁵ That is, Dr. Singer attempts to characterize a school’s *entire* need analysis methodology—which cannot realistically be captured in a few sentences—with little more than a collection of high-level statements. Unsurprisingly, the conclusion he purports to draw from this ad hoc approach is contradicted by my own systematic review of each Defendant’s need analysis methodology, as well as the very internal 568 Group survey he cites.

175. Based on my knowledge and professional experience, understanding a school’s baseline need analysis methodology (that is, the methodology they apply before the exercise of any professional judgment) requires understanding how that methodology treats specific elements in its calculation. One can achieve such an understanding by reviewing documentation such as the school’s policies and software settings used to customize its EFC calculation or through conversations with individuals knowledgeable about these details. It is not sufficient or reliable to build a complete understanding of the school’s need analysis methodology in any other way, much less determine whether schools were consistent with a certain methodology. Because Dr. Singer’s report does not demonstrate an understanding of each Defendant’s need analysis methodology, any opinions related to the potential or actual effects of Defendants’ participation in the 568 Group on their need analysis methodologies are unreliable.

176. Using my academic expertise and my professional experience, as well as need analysis manuals and other documents produced in this case, deposition testimony from current and former financial aid officers, and other discovery responses, I performed an independent

³⁵⁵ Singer Report, ¶ 157.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

and comprehensive analysis of each Defendant's consistency with the CM Guidelines. In particular, for the eight need analysis elements that had both actionable recommendations in the CM Guidelines and sufficient data across Defendants about their treatment of those elements, I analyzed whether each Defendant's treatment was consistent with the CM Guidelines' recommendations, for years for which that Defendant is included in Dr. Singer's proposed Class Period.³⁵⁶ The eight elements I analyzed were: (1) cost-of-living variances; (2) family and student assets; (3) home equity; (4) imputing the value of liquid assets; (5) elementary and secondary school tuition expenses; (6) medical expenses; (7) number of siblings in college; and (8) assessment of rental property or other real estate.³⁵⁷ Although these eight elements contained actionable recommendations, the CM Guidelines' recommendations were often nuanced, could include multiple distinct components, and/or changed from year to year. For example, the CM Guidelines' recommended treatment of medical expenses was to reduce income by the amount of unreimbursed medical expenses incurred in that year if they exceeded a certain percentage of income; however, the percentage of income recommended varied from year to year.³⁵⁸

The CM Guidelines' recommended adjustments for multiple siblings in college contained

³⁵⁶ See Singer Report, ¶ 9.

³⁵⁷ The CM Guidelines discussed but did not provide actionable recommendations on the following elements: divorced, separated, and single parents; parental unemployment; retirement allowances; IM taxation bands; family loan debt; one-time income adjustments; special expense adjustments; and parent businesses. As discussed in **Section III.D.4**, I do not consider the CM Guidelines to have provided actionable recommendations on retirement allowances because the tools the 568 Group developed were never officially incorporated into the Guidelines. In addition, although the CM Guidelines provided actionable recommendations for the definition of income, for the majority of Defendants, produced documents and deposition testimony about their need analysis methodologies did not provide sufficient information for me to analyze whether they were consistent with the CM Guidelines' recommendations. Although I did not compare each Defendant's need analysis methodology to the CM Guidelines for these elements, I summarized each Defendant's treatment of all 17 elements included in the CM Guidelines in **Appendix D**.

³⁵⁸ See, for example, NULIT-0000161662 ("Consensus Methodology Policy Guidelines Manual," The 568 Presidents' Group, 2004) at 674; NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016) at 360.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

numerous components, including a percentage adjustment for each incremental sibling, with specific recommendations to account for siblings in graduate or professional school, siblings in low-cost schools, and siblings receiving merit-based aid.³⁵⁹

177. In my analysis of Defendants' need analysis methodologies, I only classify a Defendant's treatment of a particular element in its need analysis methodology as consistent with the CM Guidelines if that treatment was consistent with all components of the CM Guidelines' recommendation in all years I analyzed, to the extent information was available. For example, although MIT capped home equity at the CM Guidelines' recommended rate from academic year 2008-2009 to academic year 2013-2014, MIT's baseline methodology included an exemption for families with annual income under \$100,000, which was inconsistent with the CM Guidelines.³⁶⁰ Similarly, Vanderbilt imputed assets based only on reported interest income while the CM Guidelines' recommendation was to impute assets using both interest and dividend income.³⁶¹ My analysis considers neither school to have been consistent with the CM Guidelines' recommendations for these respective elements.

178. **Figure 8** summarizes the extent to which each Defendant's need analysis methodology was consistent with the CM Guidelines for the eight need analysis elements I analyzed. For each school and element, I marked a Defendant with a checkmark if its approach was consistent with all components of the CM Guidelines' recommendation for that element for all available years I analyzed. In some cases, information about a Defendant's treatment

³⁵⁹ NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016) at 359.

³⁶⁰ **Appendix Table D.11.**

³⁶¹ **Appendix Table D.16.**

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

of a particular element in its need analysis methodology was incomplete (e.g., only available for certain years or certain components of a recommendation) or inconsistent (e.g., documents and deposition testimony appear contradictory). If the information was sufficiently incomplete or inconsistent that I could not reliably determine whether the Defendant's need analysis methodology was consistent with the CM Guidelines in at least one year, I marked the Defendant with an asterisk for that element. A Defendant that is left blank was *not* consistent with at least one component of the CM Guidelines' recommendation for that element in at least one year. My complete analysis is available in **Appendix D.**

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Figure 8
Each Defendant Separately Determined How Its Need Analysis Methodology Treated
Elements for Which the CM Guidelines Provided Actionable Recommendations³⁶²

Defendant	CM Guidelines' Elements							
	Cost of Living Variances	Family and Student Assets	Home Equity	Imputing the Value of Liquid Assets	K-12 Tuition Expenses	Medical Expenses	Number of Siblings in College	Rental Property/Other Real Estate
Brown					✓			✓
Caltech	✓							✓
Chicago				✓				✓
Columbia	✓		✓	✓	*	*	✓	✓
Cornell	✓				✓			
Dartmouth				✓			✓	
Duke	✓	✓	✓		✓			
Emory	✓							
Georgetown	✓		✓					✓
Johns Hopkins	✓	*	✓	✓	✓	*	*	
MIT	✓							✓
Northwestern	✓	*		*	*	*	*	✓
Notre Dame								✓
Penn	✓			✓	✓			
Rice	✓					✓		
Vanderbilt	✓							*
Yale	✓			✓		✓		
Number of Schools								
Consistent with CM	13	1	4	6	5	2	2	8
Inconsistent with CM	4	13	13	10	9	12	12	7
Contradiction/ Insufficient Information	0	3	0	1	3	3	3	2

Notes:

[1] ✓ indicates that the Defendant's treatment of a specific need analysis element was consistent with all components of the CM Guidelines' recommended treatment in all years for that Defendant's respective Class Period, to the extent this information is available.

[2] * indicates that either: (1) there was insufficient information available about the Defendant's treatment of the specific need analysis element to determine whether it was consistent with the CM Guidelines' recommended treatment for any year I analyzed; or (2) the available information about the Defendant's treatment of the specific need analysis element was conflicting for all years for that Defendant's respective Class Period, such that it was not possible to determine whether it was consistent with the CM Guidelines' recommended treatment in any year.

[3] A blank indicates that the Defendant's treatment of a specific need analysis element was demonstrably inconsistent with at least one component of the CM Guidelines' recommended treatment in at least one year for that Defendant's respective Class Period.

³⁶² Appendix Tables D.1-D.17.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

179. As can be seen in **Figure 8** above, I find that Defendants had divergent need analysis methodologies throughout their time as 568 Group members and regularly employed need analysis methodologies that were inconsistent with the recommendations in the CM Guidelines for the eight elements I analyzed. Specifically, no Defendant was consistent with the CM Guidelines' recommended treatment for all eight elements I analyzed for all years with available information. Defendants ranged from being consistent on one element (Emory, Notre Dame, Vanderbilt) to being consistent on a maximum of five elements (Columbia). Further, Defendants were not uniformly consistent with the CM Guidelines' recommended treatment for any of the eight elements I analyzed. On one end of the spectrum, thirteen Defendants were consistent with the CM Guidelines' recommendation to use the IM cost-of-living table, more than any other element I analyzed. On the other end of the spectrum, only one Defendant (Duke) was consistent with the CM Guidelines' recommendations regarding the treatment of family and student assets.
180. Note that marking a Defendant's need analysis methodology as consistent with the CM Guidelines for a particular element (identified with a checkmark in **Figure 8**) does not mean that it never deviated from the CM Guidelines' recommended treatment of that element for any student. In particular, my assessment does not incorporate professional judgment adjustments, which Defendants may have used to adjust the treatment of *any* element based on a specific student's needs or circumstances.
181. Dr. Singer alleges that surveys conducted by the 568 Group made clear that Defendants were "each applying most of the components of the CM."³⁶³ However, Dr. Singer does not

³⁶³ Singer Report, ¶ 201.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

cite to any surveys to support his point. Contrary to Dr. Singer's claim, a 568 Group survey distributed by the 568 Group before a January 2015 meeting is consistent with my findings in **Figure 8** above—that individual Defendants did not consider themselves bound by the CM Guidelines. The survey asked 568 Group members for their “non-institutional, professional perspectives” about whether they agreed “in principle,” “with reservations,” or disagreed with the treatment of each element outlined in the CM Guidelines and whether their school deviated in practice from the CM Guidelines for those elements.³⁶⁴ Consistent with my findings, Defendant and non-Defendant 568 Group members commonly reported “deviat[ing]” from the CM Guidelines “in practice.”³⁶⁵

182. Further, some Defendants made public announcements regarding need analysis policies that were inconsistent with the CM Guidelines, prioritizing transparency in their ability to meet demonstrated need. For example, upon removing home equity from their need analysis formula in 2016, MIT issued a news release highlighting this policy change; the release explained that MIT was “remov[ing] consideration of home equity as a factor in awarding financial aid” while noting that “home equity had previously been considered [by MIT].”³⁶⁶

³⁶⁴ Columbia 00059052 (“Whither Consensus Survey,” 568 Presidents’ Group, January 2015) at 054-061; CORNELL_LIT0000252669 (“Results of Consensus Methodology Questionnaire,” Cornell University, January 2015).

³⁶⁵ Out of the 19 schools that completed the questionnaire, three schools reported deviating from the recommended treatment of divorced, separated, and single parents, three schools reported deviating from the recommended treatment of cost-of-living variances, six schools reported deviating from the recommended treatment of family and student assets, two schools reported deviating from the recommended treatment of retirement allowances, two schools reported deviating from the recommended treatment of the number of siblings in college, and one school reported deviating from the recommended imputation of the value of liquid assets. See CORNELL_LIT0000252669 (“Results of Consensus Methodology Questionnaire,” Cornell University, January 2015) at 679, 681-683, 685, 687.

³⁶⁶ “Increase of 10.4 Percent in Financial Aid Will Benefit a Wide Range of MIT Families,” Massachusetts Institute of Technology News, March 4, 2016, available at <https://news.mit.edu/2016/increase-financial-aid-benefit-students-families-0304>, accessed August 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

C. Defendants' Need Analysis Methodologies Deviated from the CM Guidelines' Recommended Treatment in a Variety of Ways, Including Choices that Further Decrease EFC

183. Dr. Singer asserts that the CM Guidelines “establish a floor for EFCs,” and that a school “would be allowed to deviate from the [CM] and make global changes to its financial aid awarding policies that systematically deviated from the methodology so long as any such changes increased family contributions.”³⁶⁷ To the contrary, my analysis finds not only that Defendants routinely deviated from the CM Guidelines, but also that individual Defendants' need analysis methodologies differed from the CM Guidelines in a variety of ways, including at times by lowering EFCs further than the recommendations in the CM Guidelines would suggest. Below, I describe the wide range of approaches Defendants adopted for three of the eight elements I analyzed in detail. I similarly found variation among the remaining five elements, described in more detail in **Appendix D**. Specifically:

- *Medical Expenses*. The CM Guidelines recommended that schools use the IM's default allowance for unreimbursed medical expenses above a certain threshold, yet individual Defendants differed on the percent of income above which medical expenses were allowed.³⁶⁸
- *Elementary and Secondary School Tuition Expenses*. The CM Guidelines recommended that schools use the IM's optional allowance for elementary and secondary school tuition expenses up to a certain maximum, yet some individual Defendants did not make an allowance for such expenses at all, while those that did make an allowance differed on the maximum amount of the allowance.³⁶⁹

³⁶⁷ Singer Report, ¶¶ 126, 147.

³⁶⁸ For example, in AY 2004, Chicago made an allowance for unreimbursed medical expenses exceeding 7.5 percent of income, while Cornell made an allowance for expenses exceeding 4 percent of income and Penn made an allowance for expenses exceeding 3.4 percent of income. (**Appendix Tables D.3, D.5, D.14.**)

³⁶⁹ For example, in AY 2015, Rice did not make an allowance for elementary and secondary school tuition expenses. Vanderbilt and Dartmouth both made an allowance for such expenses, but Vanderbilt capped its allowance at

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- *Imputing Liquid Assets.* The CM Guidelines recommended that schools impute the value of liquid assets that could have generated reported interest and dividend income assuming a four percent rate of return, yet individual Defendants differed on whether they imputed liquid assets based on interest income, dividend income, or the CM Guidelines' recommendation of both interest and dividend income, as well as on the rate of return they assumed to perform the imputation.³⁷⁰
- *Cost-of-Living Adjustments.* The CM Guidelines recommended that schools adjust certain allowances against income and assets to account for cost-of-living differences using tables provided by the College Board, yet individual Defendants differed on whether they made cost-of-living adjustments at all, or only made such adjustments using professional judgment.³⁷¹
- *Assessment of Rental Property and Other Real Estate.* The CM Guidelines' recommendation for the assessment of rental property and other real estate included multiple components. While most Defendants added back rental losses and depreciation, individual Defendants varied in the way they determined the value of rental properties, with some Defendants relying on Zillow or tax assessor websites rather than the CM Guidelines' recommendation to use purchase price and a multiplier based on the year of purchase.³⁷²

I. Home Equity

184. As discussed in **Section III.D.2**, the CM Guidelines included a specific recommendation for the treatment of home equity as an asset. Before 2005, the CM Guidelines recommended that schools cap home value at 2.4 times total parent income, or equivalently

██████████ while Dartmouth's cap ██████████. (Appendix Tables D.15, D.16, D.6.)

³⁷⁰ For example, in AY 2009, Rice did not impute assets at all while Emory assumed different interest rates to impute assets using interest income (two percent) and dividend income (three percent). (Appendix Tables D.15, D.8.)

³⁷¹ For example, in AY 2007, ██████████. (Appendix Tables D.1, D.6.)

³⁷² For example, in AY 2012, ██████████. (Appendix Tables D.7, D.5.)

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

cap home equity at 2.4 times total parent income less mortgage debt. Beginning in 2005, the 568 Group instead recommended that schools directly cap home equity at 1.2 times total parent income.³⁷³

185. My review of each Defendant's need analysis methodology shows that only four Defendants applied a home equity cap at the level recommended in the CM Guidelines for all years they were included in Dr. Singer's Class Period and for which information on their baseline need analysis methodologies was available.³⁷⁴ Other Defendants' approaches have varied over time.

186. Some Defendants' baseline methodologies treated home equity in a way that would decrease a student's EFC compared to the CM Guidelines' recommended treatment:

- Some Defendants did not include home equity in their need analysis at all in some years during Dr. Singer's Class Period, including [REDACTED] and MIT (since 2016).³⁷⁵
- Before MIT removed home equity from its need analysis for all families in 2016, it removed home equity from its need analysis for families with less than \$100,000 in income beginning in 2008. It expanded the set of families for which it did not consider home equity to all families with less than \$150,000 in income beginning in 2014.³⁷⁶

³⁷³ DARTMOUTH_0000359371 ("Membership Dues in Support of The 568 Presidents' Group for FY 2006 and 2007," 568 Presidents' Group, November 28, 2005) at 375; COFHE-02-00002603 ("Report of the Common Standards Subcommittee to the 568 Presidents' Working Group," Consortium on Financing Higher Education, June 2001) at 612-613.

³⁷⁴ The Defendants my analysis identified as acting consistent with the CM Guidelines are Columbia, Duke, Georgetown, and Johns Hopkins. See **Figure 8**.

³⁷⁵ **Appendix Tables D.2, D.11.**

³⁷⁶ **Appendix Table D.11.**

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- In 2005, Penn capped the amount of home equity used in its need analysis at 1.1 times income. This cap would result in lower parent contributions than the CM Guidelines' recommended cap.³⁷⁷

187. Other Defendants' baseline methodologies treated home equity in a way that would tend to increase a student's EFC compared to the CM Guidelines' recommended treatment:

- Some Defendants did not cap home equity in various years during Dr. Singer's proposed Class Period, including Notre Dame and Northwestern.³⁷⁸
- Some Defendants used higher caps on home equity, ranging from 2-3 times income in various years during Dr. Singer's proposed Class Period, including Vanderbilt, Rice, Brown, and Emory. Using a higher cap on home equity would result in higher parent contributions than the CM Guidelines' recommended cap.³⁷⁹
- Some Defendants used a higher cap on home equity for families with higher income. For example, during the 2013-2014 academic year, Penn capped home equity at 1.2 times income for families with incomes below \$180,000, but capped home equity at 1.7 times income for families with higher incomes.³⁸⁰

188. Most Defendants' need analysis methodologies reflected the thinking of the 568 Group, which recognized the benefit to students of limiting the extent to which home equity is considered in need analysis. Still, individual Defendants rarely defaulted to the CM Guidelines' recommendation. These choices resulted in some Defendants' need analysis

³⁷⁷ **Appendix Table D.14.** Throughout the entire time period, Penn used a variation of the FM's methodology to assess parent assets in its own need analysis, which lowered the effect of home equity and other considered assets on Penn's calculation of EFC for some families relative to the IM. PENN568-LIT-00055002 ("Email with subject line 'Penn IM Tool update'," May 10, 2021) at 002. Specifically, Penn added a portion of discretionary net worth to available income and then calculated a single parent contribution from that, rather than separately calculating a parent contribution from income and a parent contribution from assets per the IM's methodology. *See also* Section V.C.

³⁷⁸ **Appendix Tables D.13, D.12.**

³⁷⁹ **Appendix Tables D.16, D.15, D.1, D.8.**

³⁸⁰ **Appendix Table D.14.**

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

methodologies resulting in lower EFCs than would be expected from the CM Guidelines' recommendation, and others resulting in higher EFCs.

2. Number of Siblings in College

189. As of December 2016, the CM Guidelines included the following five specific recommendations for how to adjust parent contributions for students with siblings in college at the same time: (1) employ the IM's default approach for multiple siblings in college, which expects ■ percent of the parent contribution if the student has one sibling in college, ■ percent if the student has two siblings in college, and ■ percent if the student has three or more siblings in college; (2) do not count siblings in graduate or professional school towards the number of siblings enrolled in college (unless they are dependents with documented parent contributions for their own education); (3) do not allow the reduction in the parent contribution for a sibling in college to exceed the sum of tuition and fees if the sibling is enrolled in community college or another low-cost school; (4) do not allow the reduction in the parent contribution for a sibling in college to exceed the sum of tuition, fees, and room and board net of non-need-based scholarship if the sibling received non-need-based scholarships; and (5) do not count parents towards the number of family members in college.³⁸¹

190. My review of each Defendant's need analysis methodology shows that only two Defendants treated siblings in college in a manner consistent with all components of the CM Guidelines' recommendation for all years they were included in Dr. Singer's Class

³⁸¹ NULIT-0000072193 ("Draft Professional Judgment Guidelines Manual," 568 Presidents' Group, August 26, 2015), at 215 (detailing IM treatment of multiple siblings); NULIT-0000038124 ("Consensus Methodology Policy Guidelines," 568 Presidents Group, November 2015), at 135-136.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Period for which information on their baseline need-analysis methodologies were available.³⁸²

191. Some Defendants' baseline methodologies treated the number of siblings in college in a way that would decrease a student's EFC relative to the CM Guidelines' recommended treatment:

- Some Defendants expected a lower percentage of the parent contribution for multiple siblings in college at the Defendant school or other similarly priced school in various years during Dr. Singer's proposed Class Period. For example, Emory expected 50 percent of the parent contribution if the student had one sibling in college and 35 percent if the student had two siblings in college if the siblings attended Emory or another similarly priced school. Similarly, MIT expected 50 percent of the parent contribution if the student and sibling both attended MIT.³⁸³
- Some Defendants allowed siblings in graduate or professional school to count towards the number of siblings in college in various years during Dr. Singer's proposed Class Period, including, for example, Cornell.³⁸⁴

192. Other Defendants' baseline methodologies treated the number of siblings in college in a way that would increase a student's EFC relative to the CM Guidelines' recommended treatment. Some Defendants did not allow for all siblings enrolled in college to reduce the expected parent contribution in various years during Dr. Singer's proposed Class Period. For example, Vanderbilt disallowed students enrolled in community college from being counted as a sibling in college and reducing the parent contribution.³⁸⁵

³⁸² The Defendants my analysis identified as acting consistent with the CM Guidelines are Columbia and Dartmouth. See **Figure 8**.

³⁸³ **Appendix Tables D.8, D.11.**

³⁸⁴ **Appendix Table D.5.**

³⁸⁵ **Appendix Table D.16.**

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

193. Defendants' need analysis methodologies were often consistent with the CM Guidelines' general acknowledgement that the financial burden of multiple children in college should reduce the parent contribution, but were rarely consistent with all of the specific components of the CM Guidelines' recommendation on this element of need analysis. As a result of these choices, some Defendants' need analysis methodologies produced lower EFCs than would be expected from the CM Guidelines' recommendation, and others produced higher EFCs.

3. Family and Student Assets

194. Because parents are expected to have other demands on their assets, only a modest share of family assets are included in the expected parent contribution. Students, on the other hand, are expected to prioritize paying for their own education and therefore the percentage of their assets that is included in the expected student contribution is much higher—under the IM, student assets are assessed at 25 percent.³⁸⁶ Prior to academic year 2015-2016, the CM Guidelines recommended that student assets be assessed as parent assets, including prepaid tuition and savings plans. Beginning in academic year 2015-2016, the CM Guidelines recommended that assets whose source is someone other than the parent (e.g., gifts from grandparents, assets for which the student is the “source of the asset,” and trusts) be assessed as student assets rather than parent assets.
195. My review of each Defendant's need analysis methodology shows that only one Defendant was consistent with the CM Guidelines for the treatment of family and student assets for

³⁸⁶ See, for example, Baum, “A Primer on Economics for Financial Aid Professionals,” CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023, p. 74.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

all years during Dr. Singer's Class Period and for which information on its baseline need-analysis methodology was available.³⁸⁷

196. Some Defendants' baseline methodologies treated family and student assets in a way that would decrease a student's EFC compared to the CM Guidelines' recommended treatment, by treating more student assets as parent assets than recommended by the CM Guidelines. For example, in academic year 2022-2023, Caltech treated all student assets as parent assets.³⁸⁸

197. Other Defendants' baseline methodologies treated family and student assets in a way that would increase a student's EFC relative to the CM Guidelines' recommended treatment. Several Defendants did not treat any student assets as parent assets in any years that I analyzed with sufficient information available, including Brown and Emory.³⁸⁹

198. Again, each Defendant's treatment of family and student assets reflected substantive differences across their individual need analysis methodologies and a departure from multiple components of the CM Guidelines' recommendation, with some resulting in higher EFCs and some resulting in lower EFCs.

D. Defendants Varied in Their Application of Professional Judgment and Did Not Consistently Rely on the 568 Group's PJ Guidelines

199. Dr. Singer alleges that Defendants "us[ed] a common manual for applying Professional Judgment" and points to a "Professional Judgment Guidelines Manual" published with

³⁸⁷ The Defendant my analysis identified as acting consistent with the CM Guidelines is Duke. See **Figure 8**.

³⁸⁸ **Appendix Table D.2.**

³⁸⁹ **Appendix Tables D.1, D.8.**

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

“early drafts” of the CM Guidelines.³⁹⁰ This manual was based on a College Board CSS manual on professional judgment with modifications, which the 568 Group published in recognition of the importance of financial aid officers’ discretion in evaluating “unique or extenuating financial circumstances in individual cases.”³⁹¹ These guidelines supplemented the CM Guidelines, much like the College Board’s professional judgment manual supplements the IM. Nevertheless, each Defendant individually determined its own approach to professional judgment and the application of professional judgment varied substantially across schools.

200. First, using a common manual to provide guidance for the exercise of professional judgment does not imply common treatment of any particular circumstance. It is widely understood in the higher education industry that professional judgment is, by its nature, applied on an individualized case-by-case basis. Even if Defendants all used the same guidelines for professional judgment, they would likely reach different individualized decisions about different individual students. This is the nature of professional judgment, whereby financial aid officers make individualized adjustments to the specific cases in front of them. As explained by Scott Wallace-Juedes, former Director of Undergraduate Financial Aid at Yale, “professional judgment by definition [...] has to be on a case by case [basis]. And you can’t have a standard approach to that. [...] here’s not a standard approach and you cannot have ‘this is how you deal with X’ on a regular case-by-case professional judgment basis.”³⁹² Similarly, Michael Hall, Executive Director of Financial

³⁹⁰ Singer Report, ¶¶ 148, 162.

³⁹¹ NULIT-0000000348 (“568 Presidents’ Group: Consensus Methodology Policy Guidelines,” 568 Presidents’ Group, 2016) at 349, 364.

³⁹² Wallace-Juedes Deposition, 147:19-148:6.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Aid at Columbia, testified that while there are “standard” professional judgment guidelines, each individual case is specific and individualized.³⁹³ Even the FM, which imposes strict restrictions on the use of professional judgment, acknowledges that professional judgment by its very nature is subjective: “Professional judgment is a subjective process. There is no right or wrong answer, so it’s not unusual for two financial aid administrators to review the same scenario and arrive at different—but equally valid—solutions.”³⁹⁴

201. Because professional judgment is used to address unique and individual circumstances, professional judgment manuals do not attempt to build a comprehensive list of instances in which professional judgment is appropriate. Joseph Russo, Former Director of Financial Aid at Notre Dame and author of a book about student aid administration, testified that it is not the objective of professional judgment manuals to provide specific answers about how to treat exceptional circumstances, because it would be impossible to comprehensively list the “zillion scenarios” a financial aid officer may encounter; instead, professional judgment manuals aim to provide suggestions of “things to think about,” leaving the financial aid officer to “weigh them carefully and then [...] make a judgment.”³⁹⁵ The PJ Guidelines published by the 568 Group similarly provided guidance on topics to consider in evaluating an individual student’s need but did not attempt to be comprehensive or to

³⁹³ Deposition of Michael Hall, Executive Director of Financial Aid at Columbia University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 September 13, 2013 (“Hall Deposition”), 195:19-196:20 (“Q. Do you [...] different numbers on PowerFAIDS for individual applicants? A. Only as professional judgment. Q. So describe for me a situation where you would do that. [...] A. I mean, professional judgments are so – I mean, we have the standard ones listed here that we do, but I think they’re so particular to each situation and different to each situation.”).

³⁹⁴ “Professional Judgment,” National Association of Financial Aid Administrators, April 2021, available at https://www.nasfaa.org/uploads/documents/NASFAA_AE_2021-22_PJ_SSG_192CD.pdf, accessed August 4, 2024, p. 3.

³⁹⁵ Deposition of Joseph Russo, former Director of Financial Aid at University of Notre Dame, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 November 30, 2023 (“Russo Deposition”), 201:1-202:13.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

cover every individual scenario. The language used in the PJ Guidelines made it clear that they were leaving room for the financial aid officer's individual judgment. For example, in relation to the treatment of Divorced/Separated/Single Parents, the 2016 PJ Guidelines provide some "considerations" that "might sometimes prove helpful" "in rendering a proper decision regarding expected parental contribution" and note that "[t]hese guidelines are always subject to the aid administrator's professional judgment."³⁹⁶

202. Second, contrary to Dr. Singer's assertion, 568 Group members did not, in fact, consistently "us[e] a common manual."³⁹⁷ Some Defendants either did not use the PJ Guidelines published by the 568 Group at all or used them as one resource among many that informed their exercise of professional judgment. For instance, Elaine Varas, Senior University Director of Student Financial Aid at Penn, testified that she and her colleagues never used the PJ Guidelines and instead relied on the professional judgment manuals published by the Department of Education and the National Association for Financial Aid Administrators.³⁹⁸ Douglas Christiansen, Vice Provost for University Enrollment Affairs & Dean of Admissions and Financial Aid at Vanderbilt, testified that the PJ Guidelines were "one piece of the many, many, many things that we continue[d] to look at to think

³⁹⁶ NULIT-0000018769 ("568 Presidents' Group: Professional Judgment Guidelines Manual," 568 Presidents' Group, 2016) at 773-775.

³⁹⁷ Singer Report, ¶ 4.

³⁹⁸ Deposition of Elaine P. Varas, Senior University Director of Financial Aid at University of Pennsylvania, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 August 2, 2023 ("August 2023 Varas Deposition"), 211:8-22 ("Q. Okay. And why is it that during your tenure Penn has not adhered to the professional judgment guidelines manual of the 568 Presidents Group? A. Because I made the decision that since the Department of Education created the professional judgment guidelines to begin with, those were the guidelines that I was going to follow. Department of Education has a full manual on professional judgment, as does the National Association for Financial Aid Administrators. So we utilize those guidelines in applying professional judgment.").

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

about how will we do our own practice of financial aid.”³⁹⁹ Michael Hall, Executive Director of Financial Aid at Columbia, also reported that the PJ Guidelines were just “a tool for the tool box,” while Columbia “internally [had its] own professional judgments beyond what’s in the 568 professional judgment guide.”⁴⁰⁰

E. Defendants’ Individualized Need Analysis Methodologies Did Not Systematically Suppress Need-Based Institutional Grant Aid

203. Dr. Singer asserts that the Challenged Conduct, including the development of the CM Guidelines and the PJ Guidelines, “concerned how to award [need-based] institutional aid” by creating a “‘consistent formula of need analysis’” that “establish[ed] a floor for EFCs” calculated by Defendants and “suppress[ed] the [need-based] institutional grant aid.”⁴⁰¹ However, as discussed in **Section III.D**, the CM Guidelines included several recommendations that reduced calculated EFCs relative to the IM’s treatment, which in turn could lead to additional financial aid for students. Additionally, as discussed in **Sections IV.A-IV.C**, Defendants continued to employ different need analysis methodologies that did not treat the CM Guidelines as prescribing a floor for EFCs. Namely, several Defendants implemented policies that *decreased* calculated EFCs in comparison to the CM Guidelines’ recommendations.

³⁹⁹ Deposition of Douglas Christiansen, Vice Provost for University Enrollment Affairs and Dean of Admissions and Financial Aid at Vanderbilt University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 December 1, 2023 (“Christiansen Deposition”), 80:21–81:19 (“Q. Wouldn’t a 19-page guidelines manual for professional judgment circumscribe the independence of professional judgment? [...A]. It’s merely a guideline; it’s not what you must or must not do. It’s, in their own words, guideline manual. It’s a way to think about things, but it’s not something that we would go through and say, Yes, yes, yes, yes. Q. Why does someone need guidelines if their professional judgment is supposed to be independent? [...A.] In our case at Vanderbilt University, while the 568 may call it guidelines, this was merely one piece of many, many, many things that we continue to look at to think about how will we do our own practice of financial aid.”).

⁴⁰⁰ Hall Deposition, 95:7-96:8.

⁴⁰¹ Singer Report, ¶¶ 124-126.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

204. Whether the EFC a particular Defendant calculated for a particular student would have been higher or lower absent the 568 Group is therefore a highly individualized question that depends on a number of factors, including: the individual financial circumstances of that student and their family; which (if any) elements discussed in the CM Guidelines were relevant to that student's particular financial circumstances; how that Defendant interpreted the relevant recommendations from the CM Guidelines; whether that Defendant's need analysis methodology was consistent (or not) with the relevant recommendations from the CM Guidelines; to what extent that Defendant applied professional judgment to arrive at that particular student's EFC; and, crucially, whether that Defendant would have made the same need analysis methodology choices absent the 568 Group.
205. Not only did the Challenged Conduct not systematically increase EFCs calculated by Defendants, but a student's EFC does not, in itself, determine the amount of need-based institutional grant aid they will be offered. Instead, as Dr. Singer has recognized, the amount of need-based institutional grant aid a school offers a student is determined by *both* that student's demonstrated financial need (i.e., the difference between their COA and EFC) and institutional packaging policies that govern how much of that need is met by grants, loans, and/or work-study.⁴⁰² In fact, at various points during Dr. Singer's Class Period, some Defendants had differential and/or preferential packaging policies that reduced the amount of self-help aid packaged for students based on their income or admissions ratings.⁴⁰³ As a result of these policies, two students admitted to the same

⁴⁰² Singer Report, ¶ 58.

⁴⁰³ For example, Columbia and Georgetown implemented preferential packaging policies, and Cornell and Dartmouth implemented differential packaging policies within the Class Period. *See, for example*, Columbia_00277674 ("COFHE Yellowbook for 2019-2020," Consortium on Financing Higher Education, 2019-

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

school with the same EFC could be offered different amounts of need-based institutional grant aid.

206. While a student's EFC affects the calculation of their demonstrated financial need, whether and to what extent a change in EFC affects the amount of need-based institutional grant aid they are offered depends critically on each institution's individual packaging policies.
207. Depending on the school's packaging policy, even if a student's EFC would have been lower absent the 568 Group—which Dr. Singer has not demonstrated would have occurred—they would not necessarily have received additional need-based institutional grant aid if the school met that increased need by increasing the amount of student loans or work-study included in their financial aid package instead. For example, Georgetown met students' demonstrated financial needs first with Pell Grants, then with federal Stafford loans, then with federal work-study or student employment. Only after awarding these types of aid did Georgetown award need-based institutional grant aid.⁴⁰⁴ Therefore, even if a particular student's EFC would have been lower absent the 568 Group, the incremental need may have been met with not yet allocated federal aid. Other Defendants, including

2020) (In the 2019-2020 academic year, Columbia reported that their Scholar Program removed loan and job expectations for selected students); GTWNU_0000195239 ("COFHE Yellowbook for 2016-2017," Consortium on Financing Higher Education, 2016-2017) (In the 2016-2017 academic year, Georgetown reported that their Georgetown Scholars Program (GSP) and John Carroll program removed loan requirements for selected students); CORNELL_LIT0000213959 ("COFHE Yellowbook for 2019-2020," Consortium on Financing Higher Education, 2019-2020) (In the 2019-2020 academic year, Cornell removed loan requirements for students with family income less than or equal to \$60,000); DARTMOUTH_0000177144 ("COFHE Yellowbook for 2019-2020," Consortium on Financing Higher Education, 2019-2020) (In the 2019-2020 academic year, Dartmouth removed loan requirements for students with family income less than \$100,000).

⁴⁰⁴ GTWNU_0000186083 ("Policies and Procedures Manual," Georgetown University, 2013-2014) at 157-158.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Cornell and Brown, similarly had policies of packaging institutional need-based grant aid only after packaging all other available types of aid such as federal grants and loans.⁴⁰⁵

208. Notably, Plaintiffs do not allege that Defendants agreed on how to package financial aid, even though the packaging process ultimately determines what portion of a student's demonstrated need is met through need-based institutional grant aid. In fact, Dr. Singer acknowledges that "[t]he question of the 'packaging of aid' was a separate matter," and record evidence—including evidence cited by Dr. Singer—shows that the 568 Group *expected* members to apply different packaging policies.⁴⁰⁶ For example, the CM Guidelines consistently referred to "individual institutional 'packaging' decisions" and noted that schools may wish to adjust their packaging policies to help manage any budgetary pressures they faced as a result of deciding to adopt some of the 568 Group's recommendations that would tend to lower EFCs for students.⁴⁰⁷ Similarly, a 2018 presentation by the 568 Technical Committee to the 568 Group specifically noted that the "CM does NOT address packaging policies nor does it address non-need-based financial aid such as often called merit-based aid related to academics or athletics" [emphasis in original].⁴⁰⁸

209. Consistent with the 568 Group's expectation, record evidence shows that Defendants adopted a wide range of packaging policies, and in fact changed these policies throughout

⁴⁰⁵ CORNELL_LIT0000213572 ("2022-2023 Undergraduate Need Analysis and Packaging Policies," Cornell University, 2022-2023) at 578-579; BROWN_0000050379 ("Financial Aid Office: Undergraduate Overview," Brown University, 2014) at 381.

⁴⁰⁶ Singer Report, ¶ 146.

⁴⁰⁷ *See, for example*, NULIT-0000161662 ("Consensus Methodology Policy Guidelines Manual," The 568 Presidents' Group, 2004) at 665-666; NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016) at 351-352.

⁴⁰⁸ DARTMOUTH_0000154245 ("Greater Good vs Institutional Needs," 568 Technical Committee, 2018) at 248.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

the Class Period. For example, COFHE Yellowbook data produced in this case report the “typical” amount of self-help aid, broken down into loans and work-study, included in a student’s financial aid package by school and year for COFHE members. COFHE defines “typical self-help” as “the starting or base package offered to students who are not affected by differential or preferential packaging[;] who are in the default category for differential or preferential packaging”; or who are in the “clear modal group” of a school’s differential or preferential packaging policy.⁴⁰⁹ These data show that Defendants differed in the amount they expected students to contribute through work-study, with the typical work study expectation ranging between \$1,350 and \$3,600.⁴¹⁰ Further, analysis of these data for first-year students in **Figure 9** below shows that Defendants included varying amounts of loans in their “typical” financial aid packages, with each Defendant decreasing its reliance on loans between 2010 and 2023. Because Defendants all meet the full demonstrated need of their admitted students,⁴¹¹ including less loans or work-study in their typical financial aid packages means, by definition, that they therefore include *higher* amounts of need-based institutional grant aid to make up the difference. This behavior is inconsistent with Dr.

⁴⁰⁹ See, for example, BROWN_0000331819 (“COFHE Yellowbook for 2014-2015,” Consortium on Financing Higher Education 2014-2015). COFHE defines preferential packaging as policies that lower self-help expectations based in part on admissions ratings while it defines differential packaging as policies that lower self-help expectations for lower-income students.

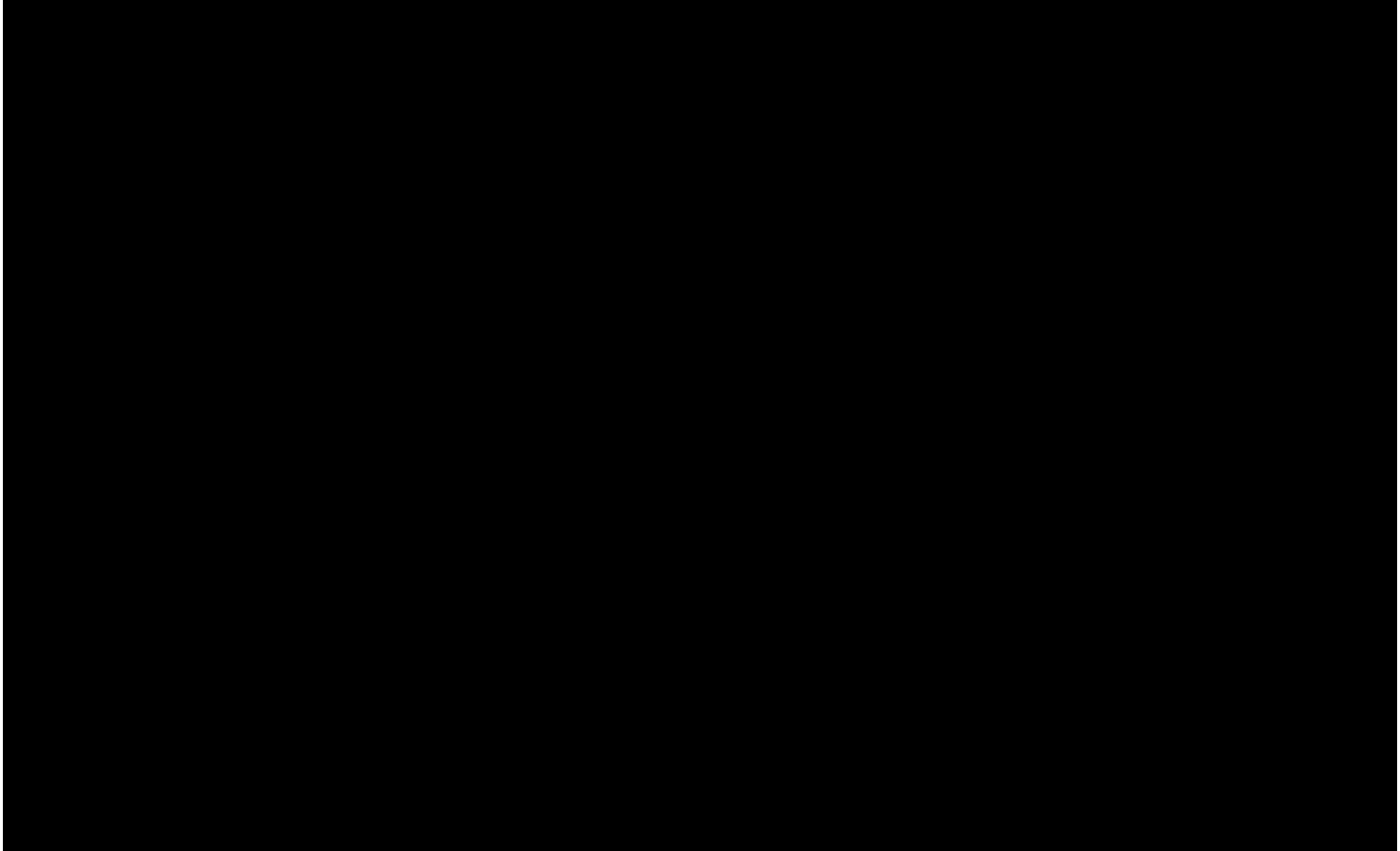
⁴¹⁰ Backup materials to this report (COFHE); **Appendix C** (COFHE).

⁴¹¹ The backup materials to this report contain information on the Defendants’ full-need policies. Backup materials to this report (Full-Need Policies); JHULIT_0000122562 (“COFHE Yellowbook for 2023-2024,” Consortium on Financing Higher Education, 2023-2024) (provides information on the full-need policies for Brown, Columbia, Cornell, Dartmouth, Emory, Georgetown, Johns Hopkins, MIT, Northwestern, Rice, Chicago, Penn, Vanderbilt, and Yale); DUKE568_0033960 (“Meeting of the Resources Committee of the Board of Trustees,” Duke University, February 26, 2021) (provides information on Duke’s full-need policy); Chang Deposition, 94:9-94:14 (describing Caltech’s full-need policy); Affleck-Graves Deposition, 220:20-221:18 (describing Notre Dame’s full-need policy).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Singer's allegation that Defendants had the "goal of suppressing [need-based] institutional grant aid."⁴¹²

Figure 9
Defendants Continued to Decrease Loans in Students' Typical Financial Aid Packages⁴¹³



Notes:

[1] The loan share is calculated as the typical self-help loan amount for freshmen divided by the combined tuition, fees, room, and board for a given school and year, from data in COFHE Yellowbooks. COFHE defines typical self-help as the starting or base package offered to students who are not affected by differential or preferential packaging or who are in the default category for differential or preferential packaging. COFHE specifies that the total tuition, mandatory fees paid by all students, and room and board costs are the announced, official numbers reported by the given school.

[2] Columbia, Penn, Vanderbilt, and Yale are not pictured because they had no-loan policies for the entire time period pictured and therefore their loan share is zero percent. Brown, Dartmouth, Emory, and Notre Dame are not pictured due to data limitations. Notre Dame is not a COFHE member, and Brown, Dartmouth, and Emory do not have continuous COFHE Yellowbook data from 2010-2023. Caltech is not pictured prior to 2017 due to data limitations.

[3] Chicago, Northwestern, MIT, Johns Hopkins, and Rice implemented no-loan policies during the time period pictured. Chicago announced its no-loan policy for the 2015-2016 academic year. However, the COFHE data show

⁴¹² Singer Report, ¶¶ 3, 126.

⁴¹³ Backup materials to this report (COFHE); **Appendix C** (COFHE).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

that Chicago's loan share fell to zero percent in the 2016-2017 academic year. Northwestern announced its no-loan policy for the fall of the 2016-2017 academic year. However, the COFHE data show that Northwestern's loan share fell to zero percent in the 2017-2018 academic year. MIT ended its no-loan policy as of the 2011-2012 academic year and reinstated its no-loan policy for the 2017-2018 academic year. However, the COFHE data show that MIT's loan share fell to zero percent beginning in the 2018-2019 academic year. Johns Hopkins announced its no-loan policy for the fall semester of 2019. However, the COFHE data show that Johns Hopkins's loan share fell to zero percent for the 2020-2021 academic year. Rice announced a no-loan policy in 2021 to be applied to all students' financial aid packages beginning in the fall semester of 2022. However, the COFHE data show that Rice's loan share fell to zero percent beginning in the 2021-2022 academic year. *See Appendix C (No-Loan Policies).*

210. In fact, as discussed in **Section II.C.5**, many Defendants implemented no-loan policies during the Class Period. Columbia, Penn, Vanderbilt, and Yale all implemented these policies before 2010 and therefore are not included in **Figure 9**, above, while the figure shows the implementation of no-loan policies at Chicago, Northwestern, MIT, Johns Hopkins, and Rice between 2015 and 2022.⁴¹⁴

211. Dr. Singer's only purported evidence that the Challenged Conduct influenced Defendants' packaging policies *at all* is a series of quotes showing that Notre Dame considered whether students would be able to repay their student loans, which he argues is consistent with what he calls the "affordability principle" of the Challenged Conduct.⁴¹⁵ Dr. Singer seems to imply that sensitivity to a student's ability to repay loans would somehow tend to increase the amount of loans in a student's financial aid package.⁴¹⁶ This makes no sense. In my experience, schools are focused on decreasing the loan burden for their students; hence the proliferation of no-loan policies. In fact, the documents Dr. Singer quotes to support this argument demonstrate that, consistent with what I would expect, Notre Dame sought to

⁴¹⁴ Backup materials to this report (COFHE); **Appendix C (COFHE)**.

⁴¹⁵ Singer Report, ¶ 191, Section II.A.4.

⁴¹⁶ Singer Report, ¶ 190.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

account for students' *inability* to repay loans, and therefore sought to decrease—not increase—the loan burden on students.⁴¹⁷

212. Because the Challenged Conduct did not systematically increase EFCs calculated by any Defendant or influence any Defendant's packaging policies—which, in fact, became more generous throughout the Class Period—it logically would not have systematically reduced the average amount of need-based institutional grant aid Defendants awarded.

V. THE REMAINING COMPONENTS OF DR. SINGER'S CHALLENGED CONDUCT ARE WIDELY ACCEPTED PRACTICES EXERCISED BROADLY IN THE HIGHER EDUCATION INDUSTRY

213. In addition to allegedly “developing and implementing” the CM Guidelines and PJ Guidelines, Dr. Singer defines the Challenged Conduct as including the following other components:

- “reaching agreement on [] six core principles of awarding financial aid”;
- “making need-based aid the primary form of financial aid”;
- “using the Institutional Methodology [...] as the ‘base’ method for need analysis and as the starting point for calculating financial aid”;
- “treating professional judgment as the exception, rather than the rule”,⁴¹⁸ and
- “reciprocally sharing competitively sensitive information relating to principles, practices, amounts, and methods regarding the provision of financial aid.”⁴¹⁹

⁴¹⁷ Singer Report, ¶ 191.

⁴¹⁸ Dr. Singer combines both aspects of the Challenged Conduct relating to the use of professional judgment as one element of the Challenged Conduct. I discuss the aspect related to the development of the PJ Guidelines in **Section IV.D.**

⁴¹⁹ Singer Report, ¶ 4.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

214. This expansive view of the Challenged Conduct attempts to frame fundamental aspects of higher education financing and the financial aid system as though they were driven by 568 Group membership, instead of recognizing them for what they are: part of the long-standing effort by many schools, including Defendants and their peers, to improve access to higher education through need-based aid, consistent with these schools' broader missions, as I described above in **Section II**. Dr. Singer ignores that these long-standing principles and approaches predate the 568 Group and are widely practiced by many higher education institutions. That is, regardless of their participation in the 568 Group, I have seen no indication that Defendants would have acted any differently than other schools focused on increasing access, both in the 568 Group and out, in that they would have approached their financial aid policies with goals of equity, efficiency, and transparency, offered substantial need-based aid, used the IM as the starting point for their need analysis, used professional judgment in exceptional circumstances, and participated in information sharing through industry groups like COFHE. Dr. Singer has not demonstrated that participation in the 568 Group drove Defendants' financial aid philosophies or practices, as opposed to those philosophies and practices being driven by the schools' broader and long-standing missions.

A. The Six “Core Principles” of Awarding Financial Aid

215. Dr. Singer claims that, as part of the Challenged Conduct, Defendants agreed on “six core principles of awarding [need-based] institutional grant aid,” which were documented in the CM Guidelines.⁴²⁰ These principles reflect long-standing values of equity, efficiency, and

⁴²⁰ Singer Report, ¶¶ 148-149.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

transparency in financial aid that many schools—including but not limited to Defendants—had committed to long before the formation of the 568 Group. For example, in response to an interrogatory regarding whether Notre Dame applied the six “core principles,” Notre Dame stated, “[t]he philosophy of Notre Dame’s Office of Financial Aid was and is consistent with the philosophy first articulated by John [Monro] of Harvard more than 60 years ago and consistently espoused by the College Board and thought leaders in the industry throughout the late 20th century.”⁴²¹ A 1971 College Board document describes how the College Board approved “Principles of Student Financial Aid Administration” in 1970, many of which were similar to the six “core principles.”⁴²² Dr. Singer has not demonstrated that the Defendants altered their commitment to the six “core principles” due to participation in the 568 Group.

216. The six “core principles” aim at enhancing: (1) vertical and horizontal equity in how aid is awarded across families; (2) efficiency in how limited aid dollars are awarded to reach the students with the greatest need, in order to increase access; and (3) transparency in how aid is awarded to help students better understand and access the financial aid system.

⁴²¹ University of Notre Dame’s Responses and Objections to Plaintiffs’ Second Set of Interrogatories to All Defendants, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 October 30, 2023 (“University of Notre Dame’s Responses and Objections to Plaintiffs’ Second Set of Interrogatories to All Defendants”), p. 23. *See also*, CBD000001 (“2003-2004 School Year IM Users’ Guide,” The College Board, 2003) at 010 (“A strong commitment to need-based aid has been embedded in the College Board’s statements of principles and practices since establishing the College Scholarship Service (CSS) in 1954.”).

⁴²² Meade Deposition, Exhibit 34, pp. 21-23. For example, one principle outlined that “[p]arents are expected to contribute according to their means, taking into account their income, assets, number of dependents and other relevant information. Students themselves are expected to contribute from their own assets and earnings, including appropriate borrowing against future earnings.”

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- *Principle 1: To the extent they are able, parents and students have the primary responsibility to contribute to educational expenses before an institution awards financial aid.*⁴²³

This principle seeks to increase efficiency in the financial aid system. By asking parents and students to contribute what is within their means to pay for higher education, schools can ensure that their finite aid dollars can be targeted to students with the greatest financial need and students whose access to higher education depends on receiving financial aid.⁴²⁴

- *Principle 2: Families should contribute to educational expenses according to their ability. Those with similar financial profiles should contribute similar amounts.*⁴²⁵

This principle reflects considerations of equity, with a particular focus on horizontal equity.⁴²⁶ As noted in **Section II.C.4**, Principles 1 and 2 are also consistent with federal and state governments' approaches to distributing public assistance resources.

- *Principle 3: Institutions should evaluate both income and assets as part of the assessment of parents' and applicants' ability to pay.*⁴²⁷

This principle seeks to ensure equity in how aid is awarded across families, improving both horizontal and vertical equity by incorporating multiple aspects of a family's financial picture to better understand the full scope of financial circumstances impacting families. This principle helps to ensure that families who appear to be similar based on income alone are in fact similar with respect to their overall financial health.⁴²⁸

⁴²³ NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016) at 349. *See also* Singer Report, ¶ 149.

⁴²⁴ COFHE-02-00009085 ("Materials for the Next Meeting on September 13," 568 Presidents' Working Group, September 3, 1999) at 087–088.

⁴²⁵ NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016) at 349. *See also* Singer Report, ¶ 149.

⁴²⁶ The Singer Report agrees that the second principle reflects horizontal equity, Singer Report, ¶ 150.

⁴²⁷ NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016) at 349. *See also* Singer Report, ¶ 149.

⁴²⁸ COFHE-02-00009085 ("Materials for the Next Meeting on September 13," 568 Presidents' Working Group, September 3, 1999) at 088–089.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- *Principle 4: Each institution should inform applicants about the policies and practices it applies when measuring a family's ability to pay, carry out its policies consistently throughout a student's eligibility, and support the awarding of need-based aid.*⁴²⁹

This principle reflects both transparency (informing applicants about policies and practices) and equity (carrying out those policies and practices consistently across families). This practice is also meant to empower students and their families during the financial aid review process.

- *Principle 5: An institution that allocates any financial assistance that is not based exclusively on need should inform all prospective applicants of the standards it applies in allocating that aid.*⁴³⁰

This principle also reflects each Defendant's emphasis on transparency, with a particular focus on being clear about whether they award any merit-based or non-need-based financial aid, which, as discussed in **Section II.C.4**, is awarded based on different criteria than financial need.

- *Principle 6: The exercise of "professional judgment" by financial aid officers in assessing a family's ability to pay should recognize unique or extenuating financial circumstances in individual cases; such professional judgment is not the proper mechanism for systematically treating groups of students differently in order to advance institutional objectives.*⁴³¹

This principle reflects a commitment to equity, in that each school should seek to apply policies and practices consistently across their applicants in similar financial situations. It recognizes that an overreliance on professional judgment can lead to families in similar situations being treated differently. However, this principle also recognizes that extenuating circumstances may not be sufficiently captured on financial aid forms that seek to balance keeping the application process simple for families with the need to collect comprehensive information, and that treating a family fairly and equitably may require making adjustments to baseline need

⁴²⁹ NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016) at 349. *See also* Singer Report, ¶ 149.

⁴³⁰ NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016) at 349. *See also* Singer Report, ¶ 149.

⁴³¹ NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016) at 349. *See also* Singer Report, ¶ 149.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

analysis calculations if the standard form and process do not capture information that is relevant to determining a student's true financial need.

217. There is nothing unique about these principles. Indeed, these principles are held by countless other schools and organizations who believe students should have access to high-quality education even if they have limited resources. For example, the College Board is an association whose members consist of more than 4,200 schools, colleges, universities, and other educational organizations.⁴³² The College Board publishes a set of principles for need analysis and the administration of student financial aid in its annual IM User Guides, and a subset of these principles mirror the 568 Group's six core principles, as shown below in **Figure 10**. The College Board views these principles as demonstrating a commitment "to enabling students from diverse economic backgrounds to attend their schools and to measuring family financial capacity using a need analysis system that is equitable and economically sound,"⁴³³ consistent with the missions and goals of each Defendant. The College Board notes that these "principles were developed by FASSAC [the Financial Aid Standards and Services Advisory Committee] and endorsed by the CSS [College Scholarship Service] Counsel after input from the CSSA [College Scholarship Service Assembly] members."⁴³⁴ In other words, the principles developed by the College Board and ratified by its vast array of members are similar to those put forth by the 568 Group,

⁴³² Additionally, the College Board provides a variety of college support programs and services to over three million students and parents, 22,000 high schools, and 3,500 colleges, as of 2003. CBD000001 ("2003-2004 School Year IM Users' Guide," The College Board, 2003) at 002.

⁴³³ CBD000001 ("2003-2004 School Year IM Users' Guide," The College Board, 2003) at 009.

⁴³⁴ CBD000001 ("2003-2004 School Year IM Users' Guide," The College Board, 2003) at 009. FASSAC is the Financial Aid Standards and Services Advisory Committee that is "a working committee that identifies issues, solicits research, and provides recommendations" to improve the IM and CSS PROFILE; CSS Council is the College Scholarship Service Council, which is "an elected body that advises staff regarding issues related to higher education financing"; and CSSA is the College Scholarship Service Assembly, which is comprised of voting members "who meet annually both nationally and regionally to provide guidance regarding issues of interest to the College Board."

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

reflecting widespread belief in these principles by a diverse range of higher education institutions and organizations.

Figure 10
The 568 Group's and College Board's Principles of Need Analysis and Administration of Student Financial Aid⁴³⁵

	568 Group Principles	College Board Principles Ratified by Member Institutions
1.	To the extent they are able, parents and students have the primary responsibility to contribute to educational expenses before an institution awards financial aid.	Because postsecondary education is a valuable personal investment, the student and the family have the primary responsibility for paying for educational costs to the extent they are able.
2.	Families should contribute to educational expenses according to their ability. Those with similar financial profiles should contribute similar amounts.	An equitable need analysis system expects families in similar circumstances to make similar contributions. An equitable need analysis system expects families with different circumstances to contribute appropriately different amounts.
3.	Institutions should evaluate both income and assets as part of the assessment of parents' and applicants' ability to pay.	A need analysis system should provide a comprehensive measurement of family financial strength. Both income and assets contribute to the family's financial strength and both should be considered when measuring any family's ability to pay. A family's ability to pay, not willingness to pay, is measured by the need analysis system.
4.	Each institution should inform applicants about the policies and practices it applies when measuring a family's ability to pay, carry out its policies consistently throughout a student's eligibility, and support the awarding of need-based aid.	Each institution has a responsibility to disclose information about the policies and practices it applies in measuring family ability to pay.
5.	An institution that allocates any financial assistance that is not based exclusively on need should inform all prospective applicants of the standards it applies in allocating that aid.	Each institution has the responsibility to make clear to students and their families whether offered funds are awarded based on financial need or other grounds.
6.	The exercise of "professional judgment" by financial aid officers in assessing a family's ability to pay should recognize unique or extenuating financial circumstances in individual cases; such professional judgment is not the proper mechanism for systematically treating groups of students differently in order to advance institutional objectives.	The financial aid administrator must always make the final assessment of family ability to pay, guided by these principles and considering the particular circumstances of the individual student and family.

⁴³⁵ Singer Report, ¶¶ 148-152, citing PENN-LIT-00162887. PENN568-LIT-00162887 ("The 568 Presidents' Group Consensus Methodology Policy Guidelines," The 568 Presidents' Group, December 2016) ("The Presidents' Group Consensus Methodology Policy Guidelines," The 568 Presidents' Group, December 2016).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

218. Witnesses from non-Defendant schools, including schools that are not members of the 568 Group, have also testified that these six “core principles” were important to their financial aid systems. For example, Karen Cooper, Director of Financial Aid at Stanford, testified that Stanford’s financial aid practices were consistent with these six principles and that she viewed the principles as being “foundational to the concept of need-based financial aid.”⁴³⁶ In addition, witnesses for Harvard, Princeton, NYU, and Amherst testified that the financial aid practices of their schools were also consistent with these principles.⁴³⁷
219. In my teaching, academic research, and discussions with higher education professionals and advocates, I have also found that these principles are and have long been widely accepted among financial aid professionals at schools seeking to increase access for

Group Consensus Methodology Policy Guidelines December 2016”); CBD000001 (“2003-2004 School Year IM Users’ Guide,” The College Board, 2003) at 010-012. I note that the Singer Report appears to have a typo in its reference to “PENN-LIT-00162887” and should instead be citing PENN568-LIT-00162887.

⁴³⁶ Deposition of Karen Cooper, Associate Dean and Director of Financial Aid at Stanford University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 March 27, 2024 (“Cooper Deposition”), 205:2-206:3. (“Q. Is it fair to say that throughout your tenure, these general principles were ones that you and Stanford would agree with? A. Yes, that is very fair. Q. And are Stanford’s financial aid practices broadly consistent with those principles? A. Yes, they are. Q. And do you view some or all of those principles as foundational to the concept of need-based financial aid? A. Yes, I do. Q. And do you view any of those principles as being unique to the 568 Group? [...] A. No, I don’t think I do. You know, I’ve seen similar language in other places. Q. So you agree these principles are widely endorsed throughout the financial aid industry? [...] A. Certainly by institutions that are awarding need-based aid.”).

⁴³⁷ Donahue Deposition, 237:22-238:1 (“Q. Were Harvard’s financial aid practices during your tenure as the director broadly consistent with these six principles? A. Yes.”); Deposition of Don Betterton, Director of Financial Aid at Princeton University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 February 22, 2024 (“Betterton Deposition”), 168:24-170:1 (“Q. The bottom part of the page has a heading that says, “Financial Aid Principles.” [...] And there are six principles listed there [...] during the latter part of your tenure at Princeton, did you disagree with any of those general principles? A. Number 5 does not apply to us, but the other five – 1, 2, 3, 4, and 6 I agree with. Q. Okay. Was there any – putting aside Number 5, which you said does not apply to Princeton, was there any point during your tenure as the director of financial aid in which you disagreed with any of the other five principles? A. No. I did not ever disagree with the five principles. Q. Okay. Did you view any of these principles as being unique to the 568 Presidents Working Group? A. No. I think the principles were agreed to by a much larger group.”); Deposition of Lynn Higinbotham, Associate Vice President of Enrollment Management at New York University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 April 12, 2024 (“Higinbotham Deposition”), 144:15-148:18; Deposition of Matthew McGann, Dean of Admission and Financial Aid at Amherst College, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 April 12, 2024 (“McGann Deposition”), 47:10-51:22.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

students. Each principle reflects thoughtful consideration of the goals of need-based aid and addresses a shortcoming of earlier financial aid systems as well as ongoing challenges in measuring the needs of low-income families. In many respects, the principles codify what had been learned by many schools after decades of experimentation with need-based financial aid. For example, it was due to the recognition that using only adjusted gross income measures was not sufficient to understand a family's financial circumstances that schools began accounting for income *and* assets to better gauge financial need and to honor the principles of equity (Principle 3).

220. Dr. Singer ignores that these principles are long-standing and are widely held by much of the higher education industry writ large. Regardless of their participation in the 568 Group, each Defendant—like countless other schools—likely would have approached its financial aid with these same principles.⁴³⁸ Dr. Singer has not demonstrated that Defendants' participation in the 568 Group impacted their individual commitments to these fundamental principles, that, absent the existence of the 568 Group, Defendants would have adopted any different principles given their broader missions, or that these commitments—followed by most of the higher education industry—led to adverse effects for students.

⁴³⁸ McDermott Deposition, 171:17-173:15 (“Q. Number 4, ‘Each institution should inform applicants about the policies and practices it applies when measuring a family’s ability to pay, carry out its policies consistently throughout a student’s eligibility, and support the awarding of need-based aid.’ Do you see that language? A. Yes. Q. And same question as to, since you’ve been the assistant or associate vice provost of financial aid, has Hopkins adhered to that principle? [...] A. I would say yes. And it predates -- all of these, quite honestly, predate, you know, when I became assistant or associate vice provost of financial aid. That’s Hopkins’ view, about being transparent with families. It’s an important element of our aid program. Q. And the fifth one, fifth principle, ‘An institution that allocates any financial assistance that is not based exclusively on need should inform all prospective applicants of the standards it applies in allocating that aid.’ Do you see that language? A. I do. Q. And same question with respect to that principle. [...] A. And I would answer similar to what I did for Number 4 in that this is about being transparent about your financial aid program, which Hopkins has valued, you know, long before I became associate or assistant vice provost.”).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

B. The Primacy of Need-Based Aid

221. Dr. Singer alleges that Defendants agreed to “mak[e] need-based aid the primary form of institutional grant aid” and argues that merit-based aid is inconsistent with the six “core principles” he alleges Defendants agreed to follow.⁴³⁹ I note that the antitrust exemption allowed 568 Group members to agree not to award any merit-based aid, but the 568 Group did not do so (as evidenced by the Defendants that offered merit-based aid, as described in **Section II.C.4**), and Dr. Singer does not allege that they did.⁴⁴⁰ As discussed in **Section II.C.4**, need-based aid goes to the students who need assistance to be able to attend higher education institutions. By contrast, research has shown that merit-based aid advantages higher-income students. Each Defendant prioritizes awarding financial aid on the basis of need to advance their goals of increasing educational access and equity, and this practice is consistent with a host of other policies and initiatives, discussed in **Section II.C**, that are similarly aimed at these goals.

222. Many non-Defendant schools, including non-568-Group schools, also primarily award need-based aid because it is aligned with their broader educational and societal missions. For example, Brian Hill, Associate Vice Provost for Student Finances and Enrollment Systems at Carnegie Mellon, explained that the use of need-based aid ensures that “every student that is admissible can attend and that when they get [to CMU] they’re able to afford to get all the way through their education.”⁴⁴¹ Matthew McGann, Dean of Admissions and

⁴³⁹ Singer Report, ¶¶ 148, 151-152.

⁴⁴⁰ Need-Based Educational Aid Act of 2015, H. R. Rep. No. 114-224, p. 2; Singer Report, ¶ 30.

⁴⁴¹ Deposition of Brian Hill, Associate Vice Provost for Student Finances and Enrollment Systems at Carnegie Mellon University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 March 14, 2024 (“Hill Deposition”), 55:16-56:4 (“Q. Let’s turn our focus to need-based financial aid, just what we’ll be talking about for the rest of our time together. Why does CMU provide need-based financial aid to its students? A. Okay. Primarily for student

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Financial Aid at Amherst College, shared similar motivations behind offering only need-based aid, testifying that Amherst's financial aid resources are limited, and that its first priority in allocating these resources is to ensure that no student must decline admission because of a financial inability to attend.⁴⁴² Karen Cooper, Director of Financial Aid at Stanford University, noted that because students who are admitted are "all merit worthy," Stanford prefers to use its financial aid resources on need-based aid.⁴⁴³ In my work, I have heard admissions directors at other schools also express this sentiment. When a school accepts only exceptional students, it is hard to differentiate which ones are more "meritorious" than others. In addition, witnesses from other higher education institutions, including witnesses from Harvard, Princeton, and the University of Wisconsin-Madison, have testified that their schools have prioritized and continue to prioritize need-based aid over other forms of aid.⁴⁴⁴

success and to make sure that every student that is admissible can attend and that when they get there that they're able to afford to get all the way through their education here.").

⁴⁴² McGann Deposition, 16:10-17:8.

⁴⁴³ Cooper Deposition, 106:20-107:8 ("Q. Since 2000, has Stanford awarded merit aid at all? A. With the exception of NCAA Division 1 athletic scholarships, we do not award merit aid. Q. And do you have an understanding as to why that's Stanford's policy? A. I've always understood it to be – you know, they're all merit worthy, all of our students who get admitted at Stanford. So it would be too hard to make those distinction [sic]. And so we prefer to put our resources toward need-based aid.").

⁴⁴⁴ *See, for example*, Donahue Deposition, 74:18-20 ("Q. And during your tenure at Harvard from 2000 to 2018, did the school ever award merit aid? A. Not from our office of financial aid."); Betterton Deposition, 62:6-16 ("Q. Do you recall whether during your tenure at Princeton the school awarded any merit aid? A. You're talking about Princeton? Q. Yes, sir. A. No, we never had a discussion about awarding merit aid. Q. What is your understanding as to why Princeton did not award any merit aid during your tenure there? A. I guess you could say it was our philosophy to be need-based only."); Maloney Deposition, 37:9-21 ("Q. Okay. So [the office of student financial assistance] does not do any merit-based scholarship in its realm of financial aid? A. Not that we award, no. [...] Q. And what about athletic scholarships, does [the office of student financial assistance] do any of that? A. So we have a liaison who actually reports to the assistant director of special awards with the athletics department. So her role is really much more compliance-based to make sure that the athletic aid and the Title IV aid does not overlap in a way that's non-compliant."), 38:18-39:9 ("Q. Do you know the rationale for UW-Madison's decision to focus on need-based aid? A. Yeah. And I believe it's really just the fact that we do have limited funding, and we want to make sure that we're prioritizing the students who likely are in our philosophy that we talked about earlier. Q. And is there a reason UW-Madison doesn't award financial aid to all students, like, lower the price basically for all students instead of just those who have higher need? A. I think the answer would be limited funding.").

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

223. The College Board similarly emphasizes that the ideal practice is to prioritize need-based aid, noting that “[f]or the last fifty years, need-based financial aid has played a critical role in opening doors of higher education to students from low and middle-income families.”⁴⁴⁵ The College Board thus outlines a key principle of financial aid policies to be “the primacy of need-based aid” because “each college or university has an obligation to support access for students who couldn’t otherwise attend the institution,” and need-based financial aid achieves this by “enabling students, regardless of their socioeconomic background, to enroll and succeed.”⁴⁴⁶ David Meade, Vice President of Financial Aid Programs and Services at the College Board, testified that it has long been “a widely accepted principle that to the extent possible financial aid should be awarded on the basis of demonstrated need,” because “put simply, need-based aid is an enabler. Otherwise, if families don’t have the means to pay for college, then they can’t go.”⁴⁴⁷ The College Board in fact has “no reason to believe” that there are *any* schools that use the CSS PROFILE and the IM but reject this principle.⁴⁴⁸
224. The ubiquitous support for the primacy of need-based financial aid, however, does not result in all schools approaching merit-based aid in the same manner. Even though need-based aid is the priority, Defendants vary in the degree to which they offer other forms of aid, if any.⁴⁴⁹ As discussed in **Section II.C.4**, some Defendants, such as Cornell, MIT, and

⁴⁴⁵ CBD000001 (“2003-2004 School Year IM Users’ Guide,” The College Board, 2003) at 010.

⁴⁴⁶ CBD000001 (“2003-2004 School Year IM Users’ Guide,” The College Board, 2003) at 010.

⁴⁴⁷ Meade Deposition, 273:17-24, 274:16-23.

⁴⁴⁸ Meade Deposition, 277:4-8 (“Q. Do you have any reason to believe that there are institutions that use the CSS Profile and the institutional methodology but reject these principles? A. No, no reason to believe that.”).

⁴⁴⁹ Singer Report Appendix 3, Table 2.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Penn, offer *only* need-based aid;⁴⁵⁰ other Defendants, such as Georgetown, offer need-based aid and athletic scholarships but do not offer other forms of merit-based aid;⁴⁵¹ still other Defendants, such as Chicago, offer need-based aid and merit-based aid but not athletic scholarships;⁴⁵² and finally, some Defendants, such as Notre Dame, offer need-based aid, athletic scholarships, and merit-based aid.⁴⁵³

225. Dr. Singer ignores that the primacy of need-based aid has long been a core principle among many schools that share the goal of increasing access, including Defendants, and has thus not demonstrated that Defendants would have approached their financial aid policies differently but for their membership in the 568 Group.

C. Use of the IM as the Starting Point for Institutional Need Analysis

226. Dr. Singer also alleges that Defendants agreed to “us[e] the Institutional Methodology [...] as the ‘base’ method for need analysis and as the starting point for calculating financial aid.”⁴⁵⁴
227. Using the IM with its default settings and without implementing any of the optional modifications is known colloquially in the higher education industry as the “Base IM.” In

⁴⁵⁰ “Grants and Scholarships,” Cornell University, available at <https://finaid.cornell.edu/types-of-aid/grants-and-scholarships>, accessed July 10, 2024; “MIT Scholarships,” Massachusetts Institute of Technology, available at <https://sfs.mit.edu/undergraduate-students/types-of-aid/mit-scholarship/>, accessed July 24, 2024; “Financial Aid,” University of Pennsylvania Admissions, available at <https://admissions.upenn.edu/affording-penn/financial-aid>, accessed July 23, 2024.

⁴⁵¹ “Georgetown Undergraduate Scholarships,” Georgetown University, available at <https://finaid.georgetown.edu/financial-resources/undergrad-scholarships/>, accessed April 23, 2024.

⁴⁵² “Athletics for All,” University of Chicago, available at <https://collegeadmissions.uchicago.edu/campus-life/athletics>, accessed August 3, 2024.

⁴⁵³ “University of Notre Dame Common Data Set,” Common Dataset Initiative, 2023-2024, available at <https://iris.nd.edu/institutional-research/common-data-set-cds/common-data-set/>, p. 19-20.

⁴⁵⁴ Singer Report, ¶ 4.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

various places in his report, Dr. Singer conflates “using the IM as the basis” for need analysis with “using the Base IM.”⁴⁵⁵ Using proper industry language, Dr. Singer’s theory does not appear to be that Defendants agreed to use the Base IM. Instead, Dr. Singer’s theory appears to be that Defendants agreed to *start with* the IM as the foundation underlying their various methodologies, rather than starting from some other launch point (such as, for example, the FM or a completely novel methodology).

228. Many schools use the IM as the starting point for allocating financial aid because it provides an initial detailed picture of a family’s financial situation and can be customized to serve institutional objectives.⁴⁵⁶ As discussed in **Sections III.A-B**, developing the IM required time, effort, resources, collaboration, and financial and economic expertise. It is not realistic or efficient for individual schools to develop their own detailed need analysis methodologies and financial aid application forms from scratch. Instead, the College Board’s IM provides a convenient starting point for schools to gauge a family’s financial need and keeps the financial aid process as simple as possible for students by limiting the number of forms.

229. Dr. Singer ignores that before, during, and after the Class Period, *hundreds* of schools throughout the country have used the CSS PROFILE and the IM as the starting point for

⁴⁵⁵ For example, Dr. Singer defines this component of the Challenged Conduct as using the IM as “the ‘base’ method for need analysis and as the starting point for calculating financial aid.” (Singer Report, ¶ 4.) He then claims the Defendants “agreed to use the Base IM” by agreeing to “‘use CSS Institutional Methodology (IM) as the base calculation’ of student and family ability to pay, or the ‘starting point’ for the subsequent exercise of professional judgment,” which reflects using the IM as the starting point for need analysis, not using the IM with its default settings specifically (i.e., the Base IM as it is known in the industry). (Singer Report, ¶ 153.) He then contrasts the “Base IM” with a “homegrown” IM and appears to treat the Defendants implementing various options and modifications as tantamount to them using the “Base IM,” rather than recognizing that these adjustments result in a “homegrown” IM, suggesting that Dr. Singer is using the term “Base IM” to refer to using the IM as the starting point for need analysis, which is not how the term is used in the industry. (Singer Report, ¶ 155.)

⁴⁵⁶ NULIT-0000181680 (“Institutional Methodology User Guide,” CollegeBoard, July 15, 2022) at 685; VANDERBILT-00272944 (“Profile Users Guide,” CollegeBoard, October 2013) at 970, 971.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

their need analysis.⁴⁵⁷ Several representatives from non-Defendant schools testified that they use the IM as the starting point for their need analysis, including Harvard, NYU, USC, and Carnegie Mellon:

- Sarah Donahue, former Director of Financial Aid at Harvard, testified that Harvard used the IM formula with its own adjustments to allocate its institutional aid. She further testified that there was “value in having a base IM in light of the adjustments that individual schools would make” because “[m]any schools don’t have the staff or the ability to make those adjustments” and the base IM is “a very thoughtful way of assessing a family’s ability to contribute.”⁴⁵⁸
- Lynn Higinbotham, Chief of Staff of Global Enrollment Management and Student Success at NYU, testified that NYU switched from using the FM to the IM in 2012. She explained that because the IM is “more refined” and “has more detail,” the switch would allow NYU to better allocate their “limited dollars to families [...] who had need.”⁴⁵⁹
- Megan Chan, Associate Dean of Compliance and Training at the financial aid office of the University of Southern California, testified that USC uses its own version of the IM for calculating need.⁴⁶⁰ Ms. Chan testified that USC’s modified version of the IM is a “better way to more accurately assess a family’s ability to pay for the student’s education.”⁴⁶¹
- Brian Hill, Associate Vice Provost for Student Finances and Enrollment Systems at Carnegie Mellon, testified that CMU uses the IM “to reach an accurate assessment of the family’s ability to pay.”⁴⁶²

⁴⁵⁷ See Meade Deposition, 171:16-172:6, 173:2-19. See also “2024-25 Participating Institutions and Programs,” CollegeBoard, available at <https://profile.collegeboard.org/profile/ppi/participatingInstitutions.aspx>, accessed December 8, 2023.

⁴⁵⁸ Donahue Deposition, 165:5-166:5, 184:23-185:24.

⁴⁵⁹ Higinbotham Deposition, 74:6-75:12.

⁴⁶⁰ Deposition of Megan Chan, Associate Dean of Financial Aid at University of Southern California, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 April 16, 2024 (“Chan Deposition”), 65:2-20; 112:17-20.

⁴⁶¹ Chang Deposition, 65:2-20.

⁴⁶² Hill Deposition, 59:24-61:4.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

230. Several scholarship programs that are run outside of a specific school also use the IM as the starting point of allocating need-based scholarships. For example, the Caroline E. Hill Scholar Fund, available to Carlisle, MA residents who plan to enroll at post-secondary schools, allocates need-based grants using financial information obtained from the CSS “Need Analysis Report.”⁴⁶³ The Francis Ouimet Scholarship Fund, which provides college scholarships to undergraduates with need who have worked at golf courses in Massachusetts, awards scholarships based on “tuition costs, college grants, and the estimated family contribution through the submitted CSS and FAFSA forms.”⁴⁶⁴
231. It is therefore not surprising that, consistent with practices across the industry, most Defendants also use the IM as a starting point for allocating need-based aid.⁴⁶⁵ While federal need-based aid may be awarded based on relatively simplistic measures of need, many schools, including both Defendants and non-Defendants, sought the benefits afforded by using the IM as a starting point in awarding financial aid to households with more

⁴⁶³ “Caroline Hill Scholarship Fund,” Carlisle High School, 2017, available at <https://www.carlislema.gov/DocumentCenter/View/46/Caroline-Hill-Scholarship-Fund-for-Carlisle-High-School-Students-Application-2017-PDF>, accessed August 2, 2024. (“You will complete the CSS Profile Application Form online. Please create this by April 15. This deadline is meant to ensure that the committee receives the Needs Analysis Report from CSS without which your application will not be considered.”).

⁴⁶⁴ “2023 Annual Impact Report,” Francis Ouimet Scholarship Fund, 2023, available at <https://www.ouimet.org/2022-annual-impact-report/>, accessed August 2, 2024. (“The amount of a Scholar’s financial award is determined by personal financial need. The Ouimet Fund is able to analyze tuition costs, college grants, and the estimated family contribution through the submitted CSS and FAFSA forms.”).

⁴⁶⁵ I note that in some cases Defendants use the FM for certain students or borrow from the FM in their own institutional methodologies. Caltech used the FM as the starting point of its need analysis for most students, with IM only used for students from under-represented backgrounds. (Chang Deposition, 22:4-27:5; CALTECH000049905 (“Cost of Moving to IM,” California Institute of Technology, 2022) at 905.) Penn used a variation of the FM’s methodology to assess parent assets in its own need analysis, adding a portion of discretionary net worth to available income and then calculating a single parent contribution from that rather than separately calculating a parent contribution from income and a parent contribution from assets. (PENN568-LIT-00000599 (“Need Analysis,” University of Pennsylvania, 2012-2013) at 622-623; CBD001802 (“CSS/Financial Aid Profile Users’ Guide,” CollegeBoard, 2012-2013) at 848, 864.)

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

complicated financial circumstances.⁴⁶⁶ For example, Kathryn Tuman, former Executive Director of Financial Aid at Columbia, testified that Columbia used the IM to allocate institutional funds because it is “a more thorough evaluation of the family’s financial circumstances than the [FM].”⁴⁶⁷ Similarly, Jeffrey Gall, Associate Dean of Student Financial Services at Georgetown, testified that the IM “looks at additional factors” than the FM and is “a much more holistic approach [to the definition] of the family’s financial strength.”⁴⁶⁸

232. Dr. Singer ignores the widespread use of the IM throughout the higher education industry, including by hundreds of other schools. Dr. Singer has thus not demonstrated that Defendants’ participation in the 568 Group influenced their individual decisions to use or not use the IM as a starting point in their individual need analysis methodologies.

D. Use of Professional Judgment in Exceptional Circumstances

233. Dr. Singer also claims that Defendants agreed to “use professional judgment where appropriate” and to apply professional judgment as “the exception, rather than the rule.”⁴⁶⁹ Dr. Singer implies that absent the Challenged Conduct, Defendants would have applied professional judgment as the rule, rather than the exception. But, as explained in **Section IV.D**, professional judgment is, by its very nature, a case-by-case tool for

⁴⁶⁶ “Institutional Methodology: Get the Full Picture,” CollegeBoard, 2014, available at <https://secure-media.collegeboard.org/digitalServices/pdf/professionals/institutional-methodology.pdf>, accessed August 29, 2023.

⁴⁶⁷ Deposition of Kathryn Tuman, former Executive Director of Financial Aid at Columbia University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 September 8, 2023 (“Tuman Deposition”), 129:10-16.

⁴⁶⁸ Deposition of Jeffrey Gall, Associate Dean at Georgetown University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 January 19, 2024 (“Gall Deposition”), 43:6-44:3.

⁴⁶⁹ Singer Report, ¶¶ 148, 160.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

addressing specific, unusual circumstances that are not satisfactorily addressed through the ordinary rules of a need analysis methodology.

234. Schools that are dedicated to the equity principle do not address common financial circumstances through professional judgment because doing so would likely lead to inconsistency that would cause inequitable treatment for students. This is because a school that uses a need analysis methodology to address common financial circumstances whenever they arise is more likely to treat students presenting those circumstances consistently than if it used an approach that called for various individual financial aid officers to exercise their own professional judgment each time they confronted those same circumstances. For that reason, Defendants' approach to professional judgment has been, and continues to be, the industry standard approach for schools that are dedicated to equity.
235. Each Defendant has long used professional judgment to adjust individual students' need analysis calculations to address unusual circumstances, consistent with industry standards, as discussed in **Section IV.D**. Doing so is also part of the process of schools learning about how the needs of their students may be evolving over time. Preserving financial aid officers' ability to apply professional judgment on a case-by-case basis allows for flexibility when extenuating circumstances lead to disparate outcomes for otherwise similarly situated families. If a particular circumstance becomes common, a school may choose to alter or augment its baseline need analysis calculation to better address a growing part of its population. It is thus unsurprising that countless schools in the industry treat professional judgment the way Defendants did while in the 568 Group.
236. Non-Defendant schools, including schools that were not members of the 568 Group, testified that they rely on professional judgment to adjust for exceptional circumstances.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

For example, Megan Chan, Associate Dean of Compliance and Training at the financial aid office of USC, defined a professional judgment adjustment as “something that is a unique special circumstance that a family may be experiencing that impacts their ability to contribute to their student’s education.”⁴⁷⁰ She further testified that “USC allows its financial aid administrators to exercise professional judgment so that they can accurately capture the family’s financial situation and make an assessment of their ability to pay for the student’s education.”⁴⁷¹ Shane Maloney, Associate Director of Federal Awards in the financial aid office at the University of Wisconsin-Madison, testified that the university applies professional judgment in special circumstances.⁴⁷²

237. Dr. Singer ignores that limiting the use of professional judgment to individual, one-off circumstances, rather than using it as a tool to address common financial circumstances, is important for ensuring equity across families in need analysis and is the industry standard approach well beyond the 568 Group. The fact that each Defendant used professional judgment to adjust students’ need analysis in exceptional circumstances—the fundamental premise underlying the use of professional judgment in need analysis—therefore does not demonstrate that Defendants’ use of professional judgment was influenced by their participation in the 568 Group.

⁴⁷⁰ Chan Deposition, 19:21–20:3.

⁴⁷¹ Chan Deposition, 63:16–25.

⁴⁷² Maloney Deposition, 45:2-16.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

E. Information Sharing

238. Finally, Dr. Singer alleges that Defendants agreed on “sharing competitively sensitive information relating to [need-based] institutional grant aid.”⁴⁷³ Specifically, Dr. Singer claims that: (1) the 568 Group “[e]xplore[d] ways of developing a data exchange program as permitted by the MIT Settlement Standards of Conduct;” (2) the 568 Group surveyed its group members to share “competitively sensitive” information; and (3) the Defendants’ membership in COFHE gave them the ability to share “competitively sensitive” information.⁴⁷⁴ Dr. Singer’s claims ignore that Defendants did not develop a data exchange program, ignore the extensive availability of comparable information in the public domain, and overstate the sensitivity of these data.
239. With respect to his first claim, Dr. Singer ignores that the contemplated data exchange never materialized. As Dr. Singer notes, the 568 Group did explore the possibility of setting up a narrow information exchange program about the financial aid received by students admitted to more than one school.⁴⁷⁵ However, the 568 Group ultimately opted not to create that data exchange. In fact, the Need-Based Educational Aid Act of 2015 noted that

⁴⁷³ Singer Report, ¶ 148.

⁴⁷⁴ Singer Report, ¶¶ 163-165. Dr. Singer also argues that even though Notre Dame is not a COFHE member, it could access the data collected by COFHE thanks to its membership of the 568 Group. Singer Report, ¶ 171.

⁴⁷⁵ The explored data exchange would have occurred after the allocation of financial aid awards, and it would have involved student-level data on financial aid awards. *See, for example*, COFHE-02-00009085 (“Materials for the Next Meeting on September 13,” 568 Presidents’ Working Group, September 3, 1999) at 096, 098 (“For each admitted applicant offered financial aid, the following three data items would be submitted by participating institutions to an independent, third-party for tabulation: 1. a common identifier (such as a social security number); 2. the amount of the family contribution; 3. the amount of the financial aid award. These data would then be merged to produce, for each pair of institutions: 1. the number of commonly admitted applicants who were awarded financial aid; 2. the number of such commonly admitted applicants for whom the family contribution at one school exceeds the family contribution at the other school by at least (a) 20%, and (b) 50%, of the average family contribution of all aided applicants at all participating schools.”).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Congress elected not to renew this component of Section 568 precisely because 568 Group members had “not utilized the component of the existing antitrust exemption.”⁴⁷⁶

240. With respect to his second and third claims, Dr. Singer ignores the importance of data in running a higher education institution. As discussed above, financial aid practices must be viewed within the broader context of a school’s funding and long-run missions and initiatives. In my experience, given the complex context within which financial aid decisions are made, many schools commonly consider other schools’ financial aid policies in developing their own fair and equitable financial aid policies.⁴⁷⁷ Higher education is an industry that often tries to study itself; schools routinely strive to learn from other schools to better serve their students and pursue their missions. As a researcher who has focused on higher education, I have often been involved in discussions and the analysis of trend data to help schools understand what others are doing, how they compare relative to other similar schools, and how they can improve.

241. As a result of the importance of data to higher education institutions, the information described by Dr. Singer as “competitively sensitive” was commonly available to both Defendant and non-Defendant schools.

242. COFHE was formed in the mid-1970s and has published its Colorbooks since long before the formation of the 568 Group.⁴⁷⁸ Therefore, the data contained in the Colorbooks were

⁴⁷⁶ Need-Based Educational Aid Act of 2015, H. R. Rep. No. 114-224, p. 3.

⁴⁷⁷ *See, for example*, CORNELL_LIT0000357469 (“Presidential Briefing: Undergraduate Financial Aid,” Cornell University, April 2015) at 478-484.

⁴⁷⁸ The Bluebook, for instance, has been published since at least 1986. “Consortium on Financing Higher Education,” Consortium on Financing Higher Education, available at <https://web.mit.edu/cofhe/>, accessed December 7, 2023; Deposition of Janet Rapelye, President of COFHE, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 January 22, 2024 (“Rapelye Deposition”), 42:1-10.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

available to COFHE-member Defendants irrespective of their membership in the 568 Group. These data were also available to the broader COFHE group, including numerous non-568 Group members such as Barnard, Bowdoin, Bryn Mawr, Carleton, Harvard, Macalester, Mount Holyoke, Princeton, and the University of Rochester.⁴⁷⁹ In addition, in some instances, non-COFHE members were able to participate in COFHE's surveys, including Bates College, Carnegie Mellon University, Haverford College, and Tufts University.⁴⁸⁰ Moreover, a school's decision to join COFHE was independent of its membership in the 568 Group. Many Defendants were members of COFHE well before they joined the 568 Group, while others joined later or never joined at all. For example, Brown, Columbia, Cornell, Dartmouth, Duke, Georgetown, Johns Hopkins, MIT, Northwestern, Rice, Chicago, Penn, and Yale were all members of COFHE as of 1990, years before the creation of the 568 Group.⁴⁸¹ Caltech joined COFHE in 2014, six years before joining the 568 Group.⁴⁸² Notre Dame is not a COFHE member at all, and other schools joined COFHE several years after joining the 568 Group: Vanderbilt joined COFHE in 2014 but joined the 568 Group in 2003, and Emory joined COFHE in 2022 but joined the 568 Group in 2004.⁴⁸³

243. In addition, testimony demonstrates that non-Defendant schools, including non-568 Group members, used the information available in COFHE's Colorbooks to benchmark themselves to their peers and ensure they could support low- and middle-income students.

⁴⁷⁹ Rapelye Deposition, Exhibit 2.

⁴⁸⁰ Rapelye Deposition, Exhibit 3.

⁴⁸¹ COFHE-02-00026553 ("Sources of Undergraduate Grant Aid at the COFHE Institutions 1988-89 to 1990-91," Consortium on Financing Higher Education, November 1990) at 566.

⁴⁸² Rapelye Deposition, Exhibit 2.

⁴⁸³ Rapelye Deposition, Exhibit 2.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

For example, Sarah Donahue, former Director of Financial Aid at Harvard, testified that she reviewed the metrics of the Colorbooks “[b]ecause [...] we were very interested in making sure that talented students from low-income backgrounds knew that Harvard was an affordable institution. And we were trying to signal that in the way that we described our financial aid program”; looking to the Colorbooks enabled Harvard “to see how that might be different across institutions or similar.”⁴⁸⁴ Karen Cooper, Director of Financial Aid at Stanford testified that Stanford reviewed the information contained in the Colorbooks because “[w]e are concerned about our ability to attract students who are from a middle income backgrounds, you know, who are daunted by our costs.”⁴⁸⁵ In fact, Dr. Singer does not present in his report any example of schools using COFHE data for any purpose other than to benchmark their financial aid practices to that of their peers.⁴⁸⁶

244. Further, the information contained in the COFHE Colorbooks that Dr. Singer refers to as “competitively sensitive” is generally publicly available and could be utilized by any school irrespective of its COFHE- or 568 Group-membership status. Specifically, Dr. Singer puts forward three examples of data that he describes as having “competitive value.” Each of these examples is generally accessible in the public domain:

- First, Dr. Singer claims that the Colorbook data “[reveal] the extent to which Defendants were using their endowments to fund their [need-based] institutional grant aid.”⁴⁸⁷ Similar information is compiled annually by another industry group, the National Association of College and University

⁴⁸⁴ Donahue Deposition, 120:23-123:3.

⁴⁸⁵ Cooper Deposition, 130:24-133:10.

⁴⁸⁶ *See, for example*, Singer Report, Appendix 7.

⁴⁸⁷ Singer Report, ¶ 173. I note that Singer Report, ¶ 173 mistakenly states that this information is contained in the “Yellowbook” instead of the “Brownbook” where this data can actually be found. *See, for example*, Columbia 00279756 (“Sources of Undergraduate Grant Aid at the COFHE Institutions: 2014-2015 Academic Year,” Consortium on Financing Higher Education, March 1, 2016) at 768.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Business Officers (“NACUBO”). NACUBO conducts an annual survey of endowment spending rates in which all 17 Defendants participate, which reports the share of endowment distribution spent on financial aid. That dataset is available for purchase.⁴⁸⁸ In addition, several schools’ annual financial reports, which are publicly available, report information about the extent to which their endowments support financial aid, although that data may be less granular. For example, Caltech reported that its endowment supported \$185.3 million in student financial aid between fiscal years 2017 and 2022.⁴⁸⁹ Brown reported that in 2023, 31 percent of its \$257 million endowment disbursement was allocated to “scholarships, fellowships, and prizes.”⁴⁹⁰ In addition, some schools, such as Northwestern, report the amount of net assets allocated to financial aid in their financial statements.⁴⁹¹

- Second, Dr. Singer also claims that “Yellowbook data [reveal] the extent to which the COFHE [sic] and Defendants were using self-help as part of their packaging.”⁴⁹² However, this information is also publicly available on the College Board website, which has the average need-based scholarship and grant award and the average need-based loan amount provided by a school.⁴⁹³ Some schools, such as Notre Dame, also provide information on their website about the extent to which their median financial aid packages

⁴⁸⁸ See, for example, The National Association of College and University Business Officers, *Fiscal Year (FY) 2023 Endowment Market Value of U.S. and Canadian Higher Education Institutions and Affiliated Foundations That Participated in the 2023 NACUBO-Commonfund Study of Endowments, and Change in Endowment Market Value from FY22 to FY23, 2023*, available at <https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fedge.sitecorecloud.io%2Fnacubo1-nacubo-prd-dc8b%2Fmedia%2FNacubo%2FDocuments%2FEndowmentFiles%2F2023-NCSE-Endowment-Market-Values-FINAL.xlsx&wdOrigin=BROWSELINK>; “Public NCSE Tables,” NACUBO, June 10, 2024, available at <https://www.nacubo.org/Research/2023/Public-NCSE-Tables>, accessed July 28, 2024.

⁴⁸⁹ “2022 Endowment Report,” California Institute of Technology, 2022, available at https://investments.caltech.edu/documents/25428/Caltech_Endowment_Brochure_FY22_SinglePages_1IIXa3c.pdf, accessed July 28, 2024, p. 3.

⁴⁹⁰ “Endowment Report 2023,” Brown University, 2023, available at https://investment.brown.edu/sites/default/files/INV_Endowment%20Report%20FY23_MP-3689_Final.pdf, accessed August 5, 2024, p. 3.

⁴⁹¹ Johnson, Craig, “Northwestern 2022 Financial Report,” KPMG, December 16, 2022, available at <https://www.northwestern.edu/financial-operations/annual-financial-reports/>, accessed September 22, 2023, p.10.

⁴⁹² Singer Report, ¶ 174.

⁴⁹³ See, for example, “Georgetown University Tuition and Costs,” BigFuture available at <https://bigfuture.collegeboard.org/colleges/georgetown-university/tuition-and-costs>, accessed July 5, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

include scholarships and grants and self-help, broken down by family income.⁴⁹⁴

- Finally, Dr. Singer states that “data in the Bluebooks [reveal] how much [need-based] institutional grant aid the schools were awarding to undergraduates and the percentage receiving such aid.”⁴⁹⁵ Again, schools often make such information publicly available on their websites: MIT’s website indicates that 58 percent of its undergraduates received a need-based grant in 2022-2023, and Penn’s website indicates that 46 percent of its undergraduates received need-based financial aid in 2023-2024.⁴⁹⁶ In addition, schools report the total amount of institutional grant aid they award to their undergraduate students and the number of their undergraduate students receiving financial aid in the Common Data Set, which is then made publicly available.⁴⁹⁷

245. Dr. Singer ignores that 568 Group members already had access to a variety of information on other schools’ endowment and financial aid spending, including through COFHE and through public sources. Dr. Singer has not demonstrated that Defendants’ participation in the 568 Group impacted the extent to which purportedly sensitive data was available to them.

⁴⁹⁴ See, for example, “What Will I Pay?,” University of Notre Dame, 2024, available at <https://admissions.nd.edu/aid-affordability/estimate-your-cost/>, accessed July 24, 2024.

⁴⁹⁵ Singer Report, ¶ 175.

⁴⁹⁶ “Undergraduate Tuition & Aid,” MITFacts, available at <https://facts.mit.edu/undergraduate-admissions/undergraduate-tuition/>, accessed July 25, 2024; “Facts and Figures,” University of Pennsylvania, available at <https://srfs.upenn.edu/financial-aid/undergraduate-aid-program/facts-and-figures>, accessed July 25, 2024.

⁴⁹⁷ See, for example, “Massachusetts Institute of Technology Common Dataset,” Common Dataset Initiative, 2022-2023, available at <https://ir.mit.edu/projects/2022-23-common-data-set/>, accessed July 25, 2024; “Cornell University Common Dataset,” Common Dataset Initiative, 2022-2023, available at https://irp.dpb.cornell.edu/wp-content/uploads/2023/03/CDS_2022-2023_Cornell-University-v5.pdf, accessed July 25, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

VI. COMPETITIVE DYNAMICS IN THE HIGHER EDUCATION INDUSTRY LEADS DEFENDANTS TO COMPETE WITH SCHOOLS OUTSIDE OF DR. SINGER'S PROPOSED RELEVANT MARKET

246. Dr. Singer alleges that “Elite Private University services constitute the relevant antitrust product market,” defining “Elite Private Universities” as “the private universities ranked in the average top 25 of the U.S. News and World Report (‘USN&WR’) university rankings from 2003-2022.”⁴⁹⁸ However, Dr. Singer’s “relevant market” does not reflect the competitive dynamics of higher education, nor any consensus within the industry or academic literature. Dr. Singer’s exclusion of public universities and liberal arts colleges ignores not only how students compare and evaluate schools, but also where proposed class members applied and considered matriculating.

247. In **Sections VI.A-C**, I discuss the various individualized factors that cause students—including Named Plaintiffs—to consider schools outside of Dr. Singer’s narrowly defined market. In **Section VI.D**, I discuss the reality that Dr. Singer’s proposed relevant market is not reflected in how the academic literature studies competition among higher education institutions, including in the academic literature cited by Dr. Singer.

A. Rankings Do Not Reflect a Full Picture of the Set of Competitors for Any Given School

248. Students and schools engage in a multi-stage dynamic matching process where prospective students: (1) identify schools to which they are interested in applying; (2) apply for admission to a set of schools of their choosing; (3) are accepted at some or all of the schools to which they applied; and (4) select where to matriculate from the set of schools to which

⁴⁹⁸ Singer Report, ¶¶ 59-60.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

they were accepted. Each student selects colleges and universities to research, visit, apply to, and attend based on personal preferences, interests, needs, and other factors. As such, each student has their own specific set of schools they are considering and will apply to, based on their specific perspective. In an effort to appeal to potential students, schools, including Defendants, differentiate themselves along a variety of qualitative dimensions in addition to emphasizing their commitment and resources related to educational quality. As a result, the set of peer schools that makes up the competitive group that any given school faces varies according to the types of students that school is trying to attract, the school's own attributes, and the local context of the school.

249. In forming their set of possible schools for application and potential matriculation, students consider a multitude of factors that are highly dependent on their personal priorities, interests, and skills. Surveys administered to students include numerous potential factors that may influence student choice. For example, in a 2022 survey by Inside Higher Ed and College Pulse (“2022 IHE survey”), students selected from 26 different factors as possible influences on their final decision on where to matriculate, such as academic reputation, quality of academic program, cost of tuition, financial aid package or scholarships, look and feel of campus, size of student population, extracurricular activities, and racial diversity.⁴⁹⁹ Similarly, responses to Admitted Student Questionnaires (“ASQs”)

⁴⁹⁹ Inside Higher Ed (“IHE”)—an online provider of news and analysis for the higher education community—partnered with College Pulse to offer the Student Voice survey. Data was collected via the survey from 2,001 undergraduate students whose college search and enrollment were impacted by the COVID-19 pandemic and from students enrolled in college by spring 2020. Topics of the survey include college admissions experiences, changes students noticed in the admissions process due to COVID-19, and changes students would like to see implemented permanently. Ezarik, Melissa, “Students Approach Admissions Strategically and Practically,” Inside Higher Ed, March 20, 2022, available at <https://www.insidehighered.com/admissions/article/2022/03/21/survey-student-college-choices-both-practical-and-strategic>, accessed August 14, 2023.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

administered by Defendants demonstrate that students considered numerous different factors when applying and enrolling. ASQs are administered by colleges to students admitted to a school for the purposes of market research and identifying competitors.⁵⁰⁰ Defendants' ASQs list factors for students to select from such as: the size of student population, the institution's reputation, quality of the academic program, study abroad opportunities, internship opportunities, consumption amenities, housing opportunities, extracurricular activities, and the "fit" or "feel."⁵⁰¹ Students frequently select these factors as important or relevant to their application or matriculation decisions, which I provide examples of in **Section VI.B.**⁵⁰² As an experienced member of admissions committees, I have often seen mention of additional factors in admissions essays when applicants explain why a certain college is appealing to them. Other metrics of interest to students are a school's mission or ideology, resources to support student career preparation, and graduate school acceptance rates. These have also come up regularly in my discussions with students

⁵⁰⁰ "Admitted Student Questionnaire PLUS™ User Guide 2013-2015," CollegeBoard, available at <https://secure-media.collegeboard.org/digitalServices/pdf/professionals/admitted-student-questionnaire-plus-user-guide.pdf>, accessed July 28, 2024; "Admitted Student Questionnaire PLUS™ User Guide 2013-2015," CollegeBoard, available at <https://secure-media.collegeboard.org/digitalServices/pdf/professionals/admitted-student-questionnaire-plus-user-guide.pdf>, accessed July 28, 2024 p. 1.

⁵⁰¹ PENN568-LIT-00143952 ("ASQ Briefing," University of Pennsylvania, 2021) at 953; BROWN_0000279244 ("Admitted Student Questionnaire Plus - Brown University Highlights Report," The College Board, 2014); CALTECH000038819 ("Summary Report of the Freshman Admissions Committee," California Institute of Technology, June 12, 2017) at 853-854; CORNELL_LIT0000284455 ("Competitor Analysis," Cornell University, 2015); DARTMOUTH_0000095466 ("Dartmouth College Admissions Student Questionnaire," Dartmouth College, 2015); GTWNU_0000057730 ("Summary Results: Fall 2016 Admitted and Withdrawn Student Survey," Georgetown University, 2016).

⁵⁰² *See, for example*, PENN568-LIT-00143952 ("ASQ Briefing," University of Pennsylvania, 2021) at 953; BROWN_0000279244 ("Admitted Student Questionnaire Plus - Brown University Highlights Report," The College Board, 2014); CALTECH000038819 ("Summary Report of the Freshman Admissions Committee," California Institute of Technology, June 12, 2017) at 853-854; CORNELL_LIT0000284455 ("Competitor Analysis," Cornell University, 2015); DARTMOUTH_0000095466 ("Dartmouth College Admissions Student Questionnaire," Dartmouth College, 2015); GTWNU_0000057730 ("Summary Results: Fall 2016 Admitted and Withdrawn Student Survey," Georgetown University, 2016).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

considering their college choices through my work with college access programs and high schools.

250. Students vary in the relative importance they assign to each factor when determining the set of colleges to apply to. As a result, even students who consider the same set of factors may develop different sets of colleges to apply to. The relative priority of each factor will affect the quality of the student's personal fit with a school, which could also result in similar students making very different decisions.⁵⁰³ Each student therefore has a potentially unique set of schools to which they apply and choose between for matriculation.
251. School rankings may attempt to incorporate some of these factors by weighing and analyzing a series of criteria to produce a ranked list of the "best" schools, but a ranking will serve as a general proxy at most. The proliferation of college ranking systems created by a range of publications highlights the fact that there are many ways to measure the quality of a school.⁵⁰⁴ The chosen measures and indicators for each ranking and the relative weight given to each factor reflects the preferences and assumptions of the company or publication that prepares the ranking. There is no single ranking methodology that definitively captures all of the factors considered by a diverse range of prospective students.

⁵⁰³ See, for example, Avery et al. (2013); Hossler, Don and Karen Gallagher, "Studying Student College Choice: A Three-Phase Model and the Implications for Policymakers," *The Journal of the American Association of Collegiate Registrars and Admissions Officers*, January 1987.

⁵⁰⁴ For example, The Center for Measuring University Performance ("CMUP") focuses on the competitive national context for major research universities. "Home," Center for Measuring University Performance, available at <https://mupcenter.org/>, accessed July 28, 2024. The National Survey of Student Engagement ("NSSE") collects information about "participation in educationally purposeful activities" among other data. "NSSE Survey Instruments," National Survey of Student Engagement, available at <https://nsse.indiana.edu/nsse/survey-instruments/index.html>, accessed July 28, 2024. The Wall Street Journal bases its ranking on student outcomes, such as graduates' salaries, among other factors. "2024 Best Colleges in the U.S.," Wall Street Journal, 2024, available at <https://www.wsj.com/rankings/college-rankings/best-colleges-2024>, accessed July 16, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

252. One way that researchers try to capture all factors utilized by students to decide where to apply and matriculate is by using data on where students actually applied and matriculated, i.e., using data on students' revealed preferences. Students' revealed preferences can be determined with win-loss data, which are data maintained by schools to track which schools they "win" most students from and which schools they "lose" most students to. These more direct sources of information reveal that students weigh numerous factors in considering a potential school, and regularly compare schools within Dr. Singer's proposed relevant market alongside schools outside of his proposed relevant market. For example, Avery et al. (2013) analyzes student application, admission, and matriculation data to create a revealed preference ranking system based on an estimated "desirability" measure of each school.⁵⁰⁵ In this revealed preference ranking, the authors find numerous liberal arts colleges and public universities ranked among the schools in Dr. Singer's proposed relevant market.⁵⁰⁶ **Figure 11** includes an excerpt of this ranking, with Defendants and schools in Dr. Singer's proposed relevant market highlighted.

⁵⁰⁵ Avery et al. (2013) collects application, admission, and matriculation data from a set of 3,240 high-achieving college seniors in the graduating class of 2004. The authors consider the school where the student matriculated to be the "winner" of a multiplayer tournament among the schools that admitted the student. The statistical model combines this information to estimate for each school a measure of desirability that, in a theoretical calculation, maximizes the probability that a student would matriculate at that school if the student did actually matriculate there. Avery et al. (2013), pp. 425-427, 429, 435.

⁵⁰⁶ Avery et al. (2013), pp. 441-444, 448, 455, 462-464.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Figure 11
Avery et al. (2013) School Rankings Based on Revealed Preferences Model of
Desirability⁵⁰⁷

Rank	School Name	Desirability	Rank	School Name	Desirability
1	Harvard University	9.13	34	Oberlin College	4.67
2	Caltech	8.77	35	Carleton College	4.63
3	Yale University	8.52	36	Vanderbilt University	4.61
4	MIT	8.16	37	Davidson College	4.58
5	Stanford University	8.11	38	UCLA	4.57
6	Princeton University	8.02	39	University of Texas at Austin	4.56
7	Brown University	7.01	40	University of Florida	4.53
8	Columbia University	6.77	41	New York University	4.46
9	Amherst College	6.61	42	Tufts University	4.43
10	Dartmouth	6.57	43	Washington and Lee University	4.41
11	Wellesley College	6.51	44	Vassar College	4.39
12	University of Pennsylvania	6.39	45	Grinnell College	4.38
13	University of Notre Dame	6.13	46	University of Michigan	4.37
14	Swarthmore College	6.07	47	U. Illinois Urbana-Champaign	4.36
15	Cornell University	5.87	48	Carnegie Mellon University	4.26
16	Georgetown University	5.77	49	U. of Maryland-College Park	4.26
17	Rice University	5.75	50	College of William and Mary	4.25
18	Williams College	5.75	51	Bowdoin College	4.25
19	Duke University	5.72	52	Wake Forest University	4.16
20	University of Virginia	5.65	53	Claremont Mckenna College	4.14
21	Brigham Young University	5.61	54	Macalester College	4.08
22	Wesleyan University	5.48	55	Colgate University	4.07
23	Northwestern University	5.30	56	Smith College	4.05
24	Pomona College	5.27	57	Boston College	4.04
25	Georgia Institute of Technology	5.17	58	University of Miami	4.02
26	Middlebury College	5.17	59	Mount Holyoke College	4.01
27	U. of California-Berkeley	5.17	60	Haverford College	3.99
28	University of Chicago	5.11	61	Bates College	3.96
29	Johns Hopkins University	5.08	62	Connecticut College	3.95
30	U. of Southern California	4.92	63	Kenyon College	3.92
31	Furman University	4.86	64	Emory University	3.88
32	U. of North Carolina-Chapel Hill	4.77	65	Washington University	3.86
33	Barnard College	4.70	66	Occidental College	3.83

Notes:

[1] Defendants are highlighted in dark yellow in the table. The schools in Dr. Singer's proposed relevant market that are not Defendants are highlighted light yellow in the table. *See* Singer Report, Table 1.

[2] Avery et al. (2013) ranks 110 schools, 44 of which are not presented in this figure for brevity.

253. As can be seen in **Figure 11**, there are numerous additional schools intermixed with the schools in Dr. Singer's proposed relevant market. For example, Avery et al. (2013) finds

⁵⁰⁷ Avery et al. (2013), pp. 435, 400, Table III. The column "Theta" in Table III of Avery et al. (2013) represents "unidimensional index of the desirability" for each school.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

that Amherst, Wellesley, Swarthmore, Williams, UVA, and BYU are all preferred to several schools in Dr. Singer's proposed relevant market, including Northwestern, Chicago, Johns Hopkins, Vanderbilt, and Carnegie Mellon. In total, 44 schools outside of Dr. Singer's proposed relevant market are preferred to Emory.⁵⁰⁸ Additional information about student preferences can be found by asking students directly about their preferences and factors underlying their decision-making, such as in surveys of admitted students or in testimony from the Named Plaintiffs in this matter. As I will discuss in **Sections VI.B-C**, these sources reveal numerous factors influencing student decision-making and numerous instances in which students considered schools outside of Dr. Singer's proposed relevant market.

254. Importantly, private national universities, public national universities, and liberal arts colleges—regardless of their ranking by USN&WR—are similar in many of the areas identified as influencing student choices, rendering them viable alternatives to one another for students trying to decide where to apply and matriculate. As Douglas Christiansen, the Vice Provost for University Enrollment Affairs & Dean of Admissions and Financial Aid at Vanderbilt testified, Vanderbilt (a private university) competes “with large flagship institutions, publics,” “small liberal arts schools,” and “national universities that are private.”⁵⁰⁹

⁵⁰⁸ Avery et al. (2013), pp. 441-444, 463.

⁵⁰⁹ Christiansen Deposition, 151:3-17.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

B. Students Apply to and Choose Among Higher Education Institutions Based on a Variety of Individualized Factors

255. As a result of the interplay between student preferences and school attributes, there are multiple ways to define the set of schools in competition with each other. In the following subsections, I elaborate on some of the key factors commonly considered by students in the school selection process to demonstrate how those factors may point to a variety of different competitive sets for a given school. Of course, while these are common factors, it is far from an exhaustive list of factors that individual students may consider.
256. Depending on which attribute or attributes a given student wishes to prioritize, a single school may have a different grouping of competitors, and many of those groupings will include a mix of Defendants, public universities, liberal arts colleges, and private universities ranked outside the USN&WR top 25. Dr. Singer's artificial set of competitors and "market" based on the rankings found in USN&WR top 25 private national universities fails to capture this competition.

1. Varying Preferences and Interests in Academic Programs

257. Students frequently consider the availability and quality of academic programs—i.e., a major, department, or general field of study—when determining where to apply and matriculate.⁵¹⁰ In the 2022 IHE survey, 65 percent of respondents listed the major or program of interest offered by a school as a factor in their final decision.⁵¹¹

⁵¹⁰ November 2023 Furda Deposition, 294:17-297:13. *See also* McLaughlin Deposition, 71:11-72:15, 255:19-256:14.

⁵¹¹ Ezarik, "Students Approach Admissions Strategically and Practically," Inside Higher Ed, March 20, 2022, available at <https://www.insidehighered.com/admissions/article/2022/03/21/survey-student-college-choices-both-practical-and-strategic>, accessed August 14, 2023

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

258. Schools may have specific programs or majors that are rated highly and have special appeal to certain students. For example, certain schools emphasize their unique focus on drama and the arts, while others tout the success of their pre-med track, and still others highlight the investments in and prominence of their schools of nursing, journalism, education, or engineering.⁵¹²
259. ASQ responses for several schools also indicate that academic specialties are a common priority for prospective students when choosing where to apply or matriculate.
- In Brown's 2014 ASQ, 84 percent of enrolling students' and 86 percent of all admitted students' responses indicated that the "availability of majors" was a "very important" factor in choosing the college they would attend.⁵¹³
 - In Penn's 2012, 2015, and 2021 ASQ summaries, "Availability of Majors" was considered "very important" to admitted students.⁵¹⁴
 - In Georgetown's 2020 and 2021 ASQs, 17 and 18 percent of students, respectively, listed "program of study" as their principal reason for selecting what school to attend, with 88 and 87 percent of students indicating this factor had a positive or strong positive effect on their decision to apply.⁵¹⁵

⁵¹² See, for example, "About Tisch," NYU | Tisch, available at <https://tisch.nyu.edu/about/about-tisch>, accessed August 4, 2024; "Become a BC Nurse," Boston College Connell School of Nursing, available at <https://www.bc.edu/bc-web/schools/cson.html>, accessed July 10, 2024; "Premedical Curriculum," Columbia College and Columbia Engineering Berick Center for Student Advising, available at https://www.cc-seas.columbia.edu/preprofessional/health/premedial_curriculum, accessed July 10, 2024; "About the College," Carnegie Mellon University, available at <https://engineering.cmu.edu/about-us/>, accessed August 4, 2024; CALTECH000032754 ("Admitted Student Questionnaire Plus - California Institute of Technology Competitor Analysis," The College Board, 2017). See also McLaughlin Deposition, 71:11-72:15; "Journalism," Northeastern University College of Arts, Media and Design, available at <https://camd.northeastern.edu/journalism/>, accessed July 28, 2024.

⁵¹³ BROWN_0000279244 ("Admitted Student Questionnaire Plus - Brown University Highlights Report," The College Board, 2014) at 255.

⁵¹⁴ PENN568-LIT-00143952 ("ASQ Briefing," University of Pennsylvania, 2021) at 953.

⁵¹⁵ GTWNU_0000023265 ("2020 New and Withdrawn Students Survey Results," Georgetown University, August 20, 2020); GTWNU_0000055122 ("2021 New and Withdrawn Students Survey Results," Georgetown University, September 1, 2021).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- University of Virginia's 2010 ASQ shows that the "Availability of your program of study" was the fourth most commonly selected factor by students as the most important reason for applying and accepting admission to UVA, trailing only "Academic reputation," "In-state school," and "Location."⁵¹⁶

260. Depending on students' interests in particular academic programs, they may consider different combinations of schools, which could include a mix of private research universities, private liberal arts colleges, and public universities. Students might even consider specialized schools: an aspiring actor might consider Yale, Juilliard, NYU, and UCLA,⁵¹⁷ while an aspiring social worker might consider Wash U, Columbia, Ohio State, and UC Berkeley.⁵¹⁸ Defendants similarly frame their competitors differently when considering schools with a specific academic focus; for example, Northwestern considers its music school in competition with Juilliard and Eastman, while its school of communications competes with NYU and USC.⁵¹⁹ Similarly, Cornell considers its College of Agriculture to compete with Michigan State in agriculture programs, but considers Carnegie Mellon a competitor in terms of research programs.⁵²⁰

261. A strong STEM program can also be an important factor to students. For example, Caltech reported that it competes with MIT, Harvard, Stanford, Yale, and Princeton for students

⁵¹⁶ UVA_0000126 ("Undergraduate Newly Admitted Students Survey: Overall Frequencies," University of Virginia Office of Institutional Assessment and Studies, January 1, 2010) at 130.

⁵¹⁷ "The 25 Best Drama Schools for an Acting Degree," The Hollywood Reporter, May 26, 2017, available at <https://www.hollywoodreporter.com/lists/25-best-drama-schools-an-acting-degree-1007229/>, accessed July 24, 2024.

⁵¹⁸ "Ranking of U.S. Social Work/Welfare Programs," Social Psychology Network, available at <https://www.socialpsychology.org/gsocwork.htm>, accessed July 28, 2024.

⁵¹⁹ Deposition of Christopher Watson, former Dean of Undergraduate Enrollment at Northwestern University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 October 10, 2023 ("Watson Deposition"), 127:22-127:25.

⁵²⁰ Cornell University's First Supplemental Responses and Objections to Plaintiffs' Second Set of Interrogatories, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 December 22, 2023 ("Cornell University's First Supplemental Responses and Objections to Plaintiffs' Second Set of Interrogatories"), p. 42.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

because those schools have a strong STEM focus.⁵²¹ A student seeking a school with a strong STEM focus may apply to these schools, but would be unlikely to apply to schools like Juilliard. This has also been empirically demonstrated in academic literature, such as Avery et al. (2013), which studies differences in revealed preferences for schools amongst students with STEM and humanities orientations.⁵²² Avery et al. (2013) finds that differences in academic offerings were more important than the rank of the college, where humanities-oriented students ranked liberal arts colleges higher than others to such an extent that Caltech and MIT, which are top-ranked nationally, fell outside of the top 25 colleges the students would rank themselves.⁵²³ The top 25 schools that humanities-oriented students ranked include a mix of Defendant and non-Defendant schools, including liberal arts colleges and public universities, and differs dramatically from Dr. Singer's proposed relevant market.⁵²⁴

262. The relative strengths of certain academic offerings in turn cause schools to tailor the set of competitors they focus on by academic program. Eric Furda, former Dean of Admissions at Penn, testified that:

“Given the undergraduate schools and programs that [Penn has], our engineering competition could look different than our nursing competition or business school competition. Competing for students in the College of Arts and Sciences, particularly in areas like the humanities and the arts, I could see

⁵²¹ Deposition of Ashley Pallie, Executive Director and Chief Admissions Officer, *Henry, et al. vs Brown University, et al.*, 1:22-cv-00125 December 15, 2023 (“Pallie Deposition”), 50:10-23, 217:7-13.

⁵²² Avery et al. (2013), p. 449.

⁵²³ Avery et al. (2013), p. 449.

⁵²⁴ Avery et al. (2013), p. 455. The Defendant schools are Yale, Brown, Columbia, Notre Dame, Penn, Dartmouth, Georgetown, Duke, Rice, Cornell, and Northwestern. The non-Defendant schools are 11 liberal arts colleges and Stanford, Harvard, and Princeton.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

smaller liberal arts and science institutions being a strong competitive set, face-to-face, for our College of Arts and Sciences.”⁵²⁵

263. Consistent with Mr. Furda’s testimony, John McLaughlin, Director of Admissions at Penn, testified that Penn considers a mix of public universities and private universities within and outside of the top 25 USN&WR rankings as competitors to its undergraduate school of nursing, such as Boston College, Michigan, Georgetown, and UVA.⁵²⁶ Meanwhile, Mr. McLaughlin testified that Penn’s undergraduate school of engineering primarily competes with a mix of public universities, liberal arts colleges, and private universities outside of the top 25 USN&WR rankings, such as University of Illinois, Harvey Mudd, and Rensselaer Polytechnic Institute.⁵²⁷ Depending on the specific student profile they are trying to recruit, these schools consider very different sets of schools to be competitors, many of which are outside of Dr. Singer’s proposed relevant market.

2. *Differences in Students’ Consideration of Location*

264. Location is another important factor for many prospective students when identifying potential schools to apply to or matriculate at. For example:

- Georgetown documents show that 90 percent or more of admitted students noted that location had a positive or strong positive effect on their decision to apply to Georgetown.⁵²⁸

⁵²⁵ November 2023 Furda Deposition, 296:8-22.

⁵²⁶ McLaughlin Deposition, 71:11-72:15, 255:19-256:14.

⁵²⁷ McLaughlin Deposition, 71:11-72:15, 255:19-256:14.

⁵²⁸ GTWNU_0000023265 (“2020 New and Withdrawn Students Survey Results,” Georgetown University, August 20, 2020); GTWNU_0000055122 (“2021 New and Withdrawn Students Survey Results,” Georgetown University, September 1, 2021).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Caltech documents show that in 2017, for example, location was the most commonly cited reason admitted students chose to attend a school other than Caltech.⁵²⁹
- Location preferences can drive the decision to select a school for matriculation or to reject it: responses to UVA's 2010 Admission Turndowns Survey show that 46 percent of students identified "location" as one of the most important reasons for applying to UVA,⁵³⁰ but also that "location" was one of the top five reasons students listed for *not* choosing to attend UVA.⁵³¹

265. While location is a common factor considered by prospective students, the underlying preferences of prospective students regarding location are highly individualized, resulting in students who value "location" nevertheless applying to different sets of schools. For example, in response to an interrogatory asking for a list of Penn's "peers," Penn stated "competition is often localized, so depending on where a student resides, the competitive set may vary."⁵³² Student survey responses indicate that location can relate to proximity to the student's home, the characteristics of the location (e.g., urban or rural), or a general regional preference.

⁵²⁹ 34 out of 98 students indicated they considered location when choosing to attend MIT instead of Caltech. CALTECH000038819 ("Summary Report of the Freshman Admissions Committee," California Institute of Technology, June 12, 2017) at 853-854; *see also* CALTECH000004708 ("Admissions Summary," California Institute of Technology, June 2020) at 716.

⁵³⁰ UVA_0000153 ("Undergraduate Admissions Turndowns Survey: Overall Frequencies," University of Virginia Office of Institutional Assessment and Studies, 2010) at 156-157. UVA's 2008 Admitted Student Survey also showed 47 percent of students identified "location" as one of the most important reasons for applying to UVA. "Location" was also a top reason for students having chosen not to attend UVA. *See also* UVA_0000376 ("Undergraduate Admissions Turndowns Survey: Overall Frequencies," University of Virginia, January 1, 2008) at 379-380.

⁵³¹ UVA_0000153 ("Undergraduate Admissions Turndowns Survey: Overall Frequencies," University of Virginia Office of Institutional Assessment and Studies, 2010) at 158-159.

⁵³² *See, for example*, University of Pennsylvania's Amended Responses and Objections to Plaintiffs' Second Set of Interrogatories to All Defendants, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 January 5, 2024 ("University of Pennsylvania's Amended Responses and Objections to Plaintiffs' Second Set of Interrogatories to All Defendants"), p. 35.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

266. Students often report preferences about a school's distance from their hometown or a family member.

- The 2022 IHE survey found that 53 percent of the more than 2,000 students surveyed were influenced by an institution's proximity to their home.⁵³³
- Responses to Emory's ASQs show students indicated interest in remaining in Georgia or being close to their home.⁵³⁴ In Emory's 2007 ASQ, 45 percent of students identified "[d]istance from home" as the second reason that they chose not to attend Emory.⁵³⁵

267. In addition, students may focus on the geographic characteristics of a campus. Eric Furda, Penn's former Dean of Admissions, testified that a student who wishes to be able to easily access the outdoors is more likely to attend a more rural school like Cornell or Dartmouth than an urban school like Penn.⁵³⁶ By contrast, students may desire a school that is located in a major city, like Georgetown, NYU, or Chicago, which may have closer proximity to internship opportunities or public transportation options.⁵³⁷

268. As a result of students' location-related preferences, contrary to Dr. Singer's proposed relevant market, Defendants often consider schools that are nearby to be strong competitors, regardless of whether they are top 25 national private universities.

⁵³³ .Ezarik, "Students Approach Admissions Strategically and Practically," Inside Higher Ed, March 20, 2022, available at <https://www.insidehighered.com/admissions/article/2022/03/21/survey-student-college-choices-both-practical-and-strategic>, accessed August 14, 2023.

⁵³⁴ For example, when asked "In the final analysis, what led you to choose Emory University?" one respondent said, "I wanted to stay in Georgia for college" another said, "I [knew] that I most likely wanted to attend college in the south, so Emory's location in Georgia helped me to [choose] them" and another said, "I am looking forward to having a great experience while staying relatively close to home." Emory_568Lit_0089206 ("Open-Ended Survey Responses," Emory University).

⁵³⁵ Emory_568Lit_0050864 ("2007 Admitted Student Survey," Emory University, 2007) at 871-872.

⁵³⁶ November 2023 Furda Deposition, 298:14-299:8.

⁵³⁷ *See, for example*, "Rural, Suburban, Urban Campus Settings," BigFuture, available at <https://bigfuture.collegeboard.org/plan-for-college/find-your-fit/types-of-colleges/campus-setting-rural-suburban-urban>, accessed July 28, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Emory considers various schools in Georgia, including the University of Georgia, Georgia Tech, and Georgia State University to be competitors in its internal documents.⁵³⁸
- Caltech's Assistant Vice President for Student Affairs testified that Caltech competes with other California schools, including public universities, such as UCLA and UC Berkeley, as well as Stanford.⁵³⁹
- Rice reports that it competes with numerous other Texas schools, including public and private universities outside of the top 25 USN&WR rankings, such as UT Austin, Texas A&M, Southern Methodist University, Texas Christian University, University of Houston, Baylor University, and Trinity University.⁵⁴⁰

269. And in the other direction, some Defendants have found that they are less competitive among students from certain areas.

- While both Caltech and MIT have strong STEM focuses and see each other as competitors,⁵⁴¹ Caltech has significantly more applicants from California than New England, suggesting that applicants outside of California are less familiar with or less interested in Caltech.⁵⁴²

⁵³⁸ Emory_568Lit_0029694 ("General Financial Aid Policy Comparatives - Common Cross Application Institutions," Emory University, February 21, 2011); Emory_568Lit_0012552 ("Fall 2005 - 2009 Destinations of Non-Matriculating Students," Emory University, 2005 - 2009).

⁵³⁹ Deposition of Jarrid Whitney, former Assistant Vice President for Student Affairs, Enrollment and Career Services and Executive Director of Admissions & Financial Aid at California Institute of Technology, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 January 19, 2024 ("Whitney Deposition"), 195:4-198:17 ("Caltech primarily competed with MIT, Stanford, Harvard, Princeton, Yale, Berkeley, and UCLA for admitted students; less so with Brown, Dartmouth, Duke, Emory, Northwestern, Notre Dame, JHU, Penn, and Rice.").

⁵⁴⁰ RICE_LIT0000069555 ("Rice Enrollment Strategy Project Steering Committee Review," Rice University, December 11, 2017) at 567; RICE_LIT0000149839 ("Tuition, Fees, Room, and Board," Rice University, 2010-2016); RICE_LIT0000024420 ("Email with subject line 'Competitive Statistics and Charts'," April 12, 2018) at 421; RICE_LIT0000026732 ("Rice Enrollment Strategy Project Steering Committee Review," Rice University, May 14, 2018) at 753.

⁵⁴¹ CALTECH000032754 ("Admitted Student Questionnaire Plus - California Institute of Technology Competitor Analysis," The College Board, 2017) at 764-777; CALTECH000046608 ("Admitted Student Questionnaire Plus - California Institute of Technology Competitor Analysis," The College Board, 2018) at 618-631; MITLIT-000025343 ("Class of 2021 Admissions and Financial Aid Update," Massachusetts Institute of Technology, May 23, 2017) at 355.

⁵⁴² CALTECH000038819 ("Summary Report of the Freshman Admissions Committee," California Institute of Technology, June 12, 2017) at 830-831.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Chicago, despite ranking fifth in USN&WR's best national colleges, has low yield rates for prospective students from Southeastern states such as Florida, Alabama, and South Carolina.⁵⁴³
- [REDACTED]
[REDACTED]
[REDACTED].⁵⁴⁴

3. *The Varied Role of Athletics in Student Choice*

270. Some prospective students also place significant weight on the availability and quality of athletics at a given school, whether that student anticipates becoming an athlete at the school or desires a school with a particular athletic (and often social) atmosphere.⁵⁴⁵ In the 2022 IHE survey, 11 percent of respondents listed sports teams or athletics as an influence in their final decision for selecting a school to attend.⁵⁴⁶ In line with the IHE survey, UVA's 2011 Survey of Admitted Students showed that 39 percent of students noted athletics as either important or very important when considering applying to UVA.⁵⁴⁷ Responses from Emory's 2017 Open-Ended Survey also show that sports teams and athletics play an important role in some students' matriculation decisions.⁵⁴⁸

⁵⁴³ Deposition of Cameron Williams, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 September 7, 2023 ("Williams Deposition"), Exhibit 10; USNWR0000000460 ("Best Colleges," U.S. News & World Report, 2014) UCHICAGO_0000167527 ("University of Chicago Undergraduate Admissions Recruitment Review," University of Chicago, June 15, 2012) at 528.

⁵⁴⁴ DUKE568_0105627 ("Opinion Elite National Survey," Duke University, January 1, 2011) at 640.

⁵⁴⁵ *See, for example*, Griesbach, Rebecca, "Nick Saban's lasting impact on Alabama's campus, students: 'That pride shows'," AL.com, February 2, 2024, available at <https://www.al.com/educationlab/2024/02/nick-sabans-lasting-impact-on-alabamas-campus-students-that-pride-shows.html>, accessed July 8, 2024.

⁵⁴⁶ Ezarik, "Students Approach Admissions Strategically and Practically," Inside Higher Ed, March 20, 2022, available at <https://www.insidehighered.com/admissions/article/2022/03/21/survey-student-college-choices-both-practical-and-strategic>, accessed August 14, 2023.

⁵⁴⁷ UVA_0000329 ("Newly Admitted Student Survey: Means and Frequencies," University of Virginia Office of Institutional Assessment and Studies, January 1, 2011) at 332.

⁵⁴⁸ When asked "In the final analysis, what led you to choose Emory University?" many respondents mentioned athletics such as a "good tennis team," "strong athletic program," and "DIII Athletics." *See* Emory_568Lit_0089206 ("Open-Ended Survey Responses," Emory University).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

271. Among prospective students that intend to play a particular sport as an undergraduate, the sport the student plays and the student's level of ability can impact the schools they consider. While a prospective football player may apply to both public and private universities like Michigan or Notre Dame, a student playing ice hockey may prefer University of Minnesota or Brown.⁵⁴⁹ In addition, some schools' teams play in more competitive conferences and divisions, which may be more or less attractive for students based on their likelihood of making a team. A student whose level of ability is not competitive enough to succeed at a Division I school, such as Michigan or Notre Dame, may consider Division III schools, such as Bates, Chicago, Grinnell, or MIT.
272. Students who are not athletes themselves but who want a higher education experience oriented towards attending sporting events may also consider schools with renowned sports programs.⁵⁵⁰ Publicized athletic events can drive which schools the prospective students who prioritize an athletic atmosphere are interested in.
- Forbes found a positive correlation between application rates and NCAA Basketball Tournament performance.⁵⁵¹
 - The Washington Post reported that deans of enrollment services at Auburn, LSU, Oregon, and Florida observed increases in applicants in 2011 following participation in the college football Bowl Championship Series

⁵⁴⁹ "Best Hockey Colleges," NCSA College Recruiting, available at <https://www.ncsasports.org/best-colleges/best-ice-hockey-colleges>, accessed August 4, 2024; "Best Division I Football Colleges," NCSA College Recruiting, available at <https://www.ncsasports.org/best-colleges/best-division-1-football-colleges>, accessed August 4, 2024.

⁵⁵⁰ *See, for example*, "Does a Good Football Team Make a Good College?," Liberal Arts Colleges, available at <https://www.liberalartscolleges.com/does-a-good-football-team-make-a-good-college/>, accessed July 24, 2024; Clodfelter, Kirsten, "I Picked My School Based on Its Sports Teams. Here's How I Actually Liked It," College Covered, available at <https://www.collegecovered.com/plan/pick-college-on-sports/>, accessed July 24, 2024.

⁵⁵¹ Boyington, Amy and Brenna Swanston, "Does March Madness Performance Drive College Application Rates?," Forbes, February 28, 2024, available at <https://www.forbes.com/advisor/education/online-colleges/does-march-madness-performance-drive-college-application-rates/>, accessed July 9, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

(“BCS”) and Villanova saw an increase in applicants after winning the 2016 NCAA basketball tournament.⁵⁵²

- Record evidence from Duke shows its high-achieving basketball program plays a large role in forming the school’s identity, increases its visibility, and potentially strengthens its alumni network.⁵⁵³
- Financial aid officers found many students are drawn to Vanderbilt because of its participation in NCAA Division I sports.⁵⁵⁴
- Georgetown’s 2020 and 2021 ASQs show that between 36 and 39 percent of students mentioned that Georgetown’s “Reputation in Athletics” had a positive or strongly positive effect on their decision to apply to Georgetown.⁵⁵⁵
- Georgetown experienced “the Ewing Effect” in the 1980s and saw an increase in applicants due to the dominance of its men’s basketball team, led by Patrick Ewing.⁵⁵⁶ Boston College similarly experienced “the Flutie Effect” in the 1980s due to winning a high-profile football game with quarterback Doug Flutie.⁵⁵⁷

273. Of note, the various factors that influence student choice can lead to different competitive sets in different contexts. In the context of athletics, Notre Dame—which has a highly competitive Division I football team—may compete with other schools with highly

⁵⁵² Mayes, Brittany and Emily Giambalvo, “Does Sports Glory Create a Spike in College Applications? It’s Not a Slam Dunk,” The Washington Post, December 6, 2018, available at <https://www.washingtonpost.com/graphics/2018/sports/ncaa-applicants/>, accessed July 28, 2024.

⁵⁵³ DUKE568_0105627 (“Opinion Elite National Survey,” Duke University, January 1, 2011) at 634, 637-638, 645.

⁵⁵⁴ Deposition of John Gaines, former Associate Dean of Undergraduate Admissions at Vanderbilt University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 August 3, 2023 (“Gaines Deposition”), 224:14-225:10.

⁵⁵⁵ GTWNU_0000023265 (“2020 New and Withdrawn Students Survey Results,” Georgetown University, August 20, 2020); GTWNU_0000055122.

⁵⁵⁶ McCann, Michael, “The Flutie Effect: How UMBC Can Benefit from a Historic NCAA Tournament Upset,” Sports Illustrated, March 17, 2018, available at <https://www.si.com/college/2018/03/17/umbc-virginia-upset-doug-flutie-jairus-lyles>, accessed July 28, 2024.

⁵⁵⁷ McCann, “The Flutie Effect: How UMBC Can Benefit from a Historic NCAA Tournament Upset,” Sports Illustrated, March 17, 2018, available at <https://www.si.com/college/2018/03/17/umbc-virginia-upset-doug-flutie-jairus-lyles>, accessed July 28, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

competitive football teams such as Michigan.⁵⁵⁸ In comparison, Notre Dame's competitive set for students looking for a higher education experience within a religious community that follows the values and practices of Catholicism would likely look very different. Notre Dame recognizes that its mission leads students to consider it alongside other Catholic schools, and thus has, for example, identified Georgetown, Dayton, Creighton, and Marquette, all of which have a Catholic focus, to be competitors for students who consider religious affiliation a relevant factor.⁵⁵⁹

C. Named Plaintiffs' Decisions Illustrate How Students Consider Multiple Factors When Selecting a School

274. The varied set of criteria considered by prospective students is reflected in the decisions of Named Plaintiffs in this matter, each of whom considered several different factors based on their individual interests and personal experiences. As a result, most of the Named Plaintiffs applied to a range of schools—including private national universities, public national universities, liberal arts colleges, and schools ranked below the top 25 according to USN&WR—and matriculated at schools based on factors beyond the simple ranking or school type proposed by Dr. Singer in defining his proposed relevant market, if they considered either of these factors at all.⁵⁶⁰

⁵⁵⁸ "From Game Day Thrills to Championship Victories: 10 Best Colleges for Sports Fans," USA Today 10Best, September 1, 2023, available at <https://10best.usatoday.com/awards/travel/best-college-for-sports-fans-2023/>, accessed July 24, 2024.

⁵⁵⁹ ND_0158341 ("Email with subject line 'RE: Draft Strategic Plan'," October 7, 2013) at 344.

⁵⁶⁰ Two Named Plaintiffs, Sia Henry and Alexander Leo-Guerra, applied to Duke as part of the early decision process, in which students apply to one school at an earlier deadline and commit to matriculating at this school if they are admitted. These Named Plaintiffs similarly considered a variety of factors when deciding to which schools to apply. Ms. Henry considered the ranking, the look of campus, and the quality of the basketball team before choosing to apply early decision to Duke. Mr. Leo-Guerra considered the reputation and ranking of the school, the beauty of the campus, the "restaurant scene" in the town, and institution's dining halls before choosing

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

275. Named Plaintiff Cameron Williams considered multiple factors including location, strength of theater programs, study abroad opportunities, “overall experience,” academic rigor, “what students were doing off campus,” and on-campus housing accommodations.⁵⁶¹ Of these factors, location was an important factor, including the proximity to Louisville, which is reflected in the list of schools to which Mr. Williams applied.⁵⁶² Mr. Williams applied to Bellarmine University, Centre College, Hanover College, Northern Kentucky University, Transylvania University, University of Louisville, Vanderbilt, and Xavier University.⁵⁶³ These schools are a mix of private liberal arts colleges, private national and regional universities, and public universities that were ranked between 4th and 161st in USN&WR in 2013.⁵⁶⁴ Counter to Dr. Singer’s assertion, Mr. Williams did not consider USN&WR rankings in his application choices at all.⁵⁶⁵ Mr. Williams noted that he also considered applying to the University of Louisville and Centre College because many of

to apply early decision to Duke. Deposition of Sia Henry, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 September 15, 2023 (“Henry Deposition”), 105:18-24, 106:12-14; Plaintiff Sia Henry’s Supplemental Responses and Objections to Defendants’ First Set of Interrogatories, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 June 26, 2023 (“Plaintiff Sia Henry’s Supplemental Responses and Objections to Defendants’ First Set of Interrogatories”), p. 4; Deposition of Alexander Leo-Guerra, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 August 25, 2023 (“Leo-Guerra Deposition ”), 80:1-14, 85:7-11, 86:13-87:21; Plaintiff Alexander Leo-Guerra’s Second Supplemental Responses and Objections to Defendants’ First Set of Interrogatories, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 August 24, 2023 (“Plaintiff Alexander Leo-Guerra’s Second Supplemental Responses and Objections to Defendants’ First Set of Interrogatories”), p. 4.

⁵⁶¹ Williams Deposition, 93:6-97:6.

⁵⁶² Williams Deposition, 95:12-96:10, 109:12-110:11, 176:8-177:6.

⁵⁶³ Named Plaintiff Williams also considered applying to additional schools based on these factors, such as the University of Kentucky and the University of Cincinnati. Plaintiff Cameron Williams’ Responses and Objections to Defendants’ First Set of Interrogatories, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 February 2, 2023 (“Plaintiff Cameron Williams’ Responses and Objections to Defendants’ First Set of Interrogatories”), p. 4; Williams Deposition, 83:24-84:12.

⁵⁶⁴ Williams Deposition, Exhibit 15. The schools’ rankings are from multiple USN&WR categories including National Universities, Regional Universities, and National Liberal Arts Colleges.

⁵⁶⁵ Williams Deposition, 101:17-19 (“Q. Did you consider college rankings when deciding where to apply to college? A. No.”).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

his friends attended those schools.⁵⁶⁶ Mr. Williams was accepted at Vanderbilt, Centre College, University of Louisville, Bellarmine University, Hanover College, Transylvania University, and Xavier University.⁵⁶⁷ He chose to matriculate at Vanderbilt because of its strong theater program, its location ("Nashville is a great city"), extracurriculars, and because his mother is an alumna.⁵⁶⁸

276. Named Plaintiff Brittany Tatiana Weaver also considered location to be a key factor in her decision to apply to schools because she "didn't want to be near home" and wanted to be in a "cool city."⁵⁶⁹ Ms. Weaver applied to Boston College and NYU because of their proximity to cities.⁵⁷⁰ Another key factor for Ms. Weaver was having a personal connection to a school. Ms. Weaver applied to Vanderbilt and University of Arizona because her mother and brother are alumni, and she applied to the University of Florida for its proximity to an aunt.⁵⁷¹ Ms. Weaver also elected to apply to Pepperdine University after speaking with the head of the institution.⁵⁷² Ms. Weaver was accepted at Boston College, Pepperdine University, University of Arizona, University of Florida, and Vanderbilt. These schools are a mix of private and public universities that were ranked between 17th and 50th in

⁵⁶⁶ Williams Deposition, 91:21-92:3.

⁵⁶⁷ Plaintiff Cameron Williams' Responses and Objections to Defendants' First Set of Interrogatories, p. 4.

⁵⁶⁸ Williams Deposition, 110:6-111:12.

⁵⁶⁹ Deposition of Brittany Weaver, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 November 14, 2023 ("November Weaver Deposition"), 39:4-13, 46:4-11.

⁵⁷⁰ November Weaver Deposition, 39:4-13, 46:4-11, 72:9-16; Plaintiff Sia Henry's Supplemental Responses and Objections to Defendants' First Set of Interrogatories, p. 4.

⁵⁷¹ November Weaver Deposition, 44:15-17, 46:24-47:1, 80:17-22; Plaintiff Brittany Tatiana Weaver's Supplemental Responses and Objection to Defendants' First Set of Interrogatories, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 January 5, 2023 ("Plaintiff Brittany Tatiana Weaver's Supplemental Responses and Objection to Defendants' First Set of Interrogatories"), p. 4.

⁵⁷² November Weaver Deposition, 41:14-17.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

USN&WR,⁵⁷³ but Ms. Weaver stated that the ranking or prestige of the schools “wasn’t like a huge factor.”⁵⁷⁴ Ms. Weaver chose to matriculate at Vanderbilt due to her mother’s connection to the school and her desire to live in Nashville.⁵⁷⁵

277. Named Plaintiff Michael Maerlender considered the strength of theater programs, social atmosphere, academic rigor, student life, physical environment, and the ability to study various subjects.⁵⁷⁶ Mr. Maerlender applied to Vanderbilt because he was interested in its performing arts program “as well as the ability to pursue it while pursuing other areas of study.”⁵⁷⁷ He also considered recommendations from family and a college counselor, leading him to apply to University of Nebraska-Lincoln, Trinity College, Wesleyan University, and Vassar College.⁵⁷⁸ These schools are a mix of liberal arts colleges, private universities, and public universities and were ranked between 11th and 99th in USN&WR.⁵⁷⁹ Mr. Maerlender considered rankings from USN&WR and Princeton Review as well as specific theater program rankings.⁵⁸⁰ While ranking was initially a factor, Mr.

⁵⁷³ November Weaver Deposition, Exhibit 4. The rankings in Exhibit 4 of the November Weaver Deposition are based on the USN&WR Best National Universities ranking from the year Weaver applied to the schools.

⁵⁷⁴ November Weaver Deposition, 40:24-41:5.

⁵⁷⁵ November Weaver Deposition, 82:3-83:5.

⁵⁷⁶ Deposition of Michael Maerlender, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 September 18, 2023 (“Maerlender Deposition”), 81:7-22, 82:7-18, 91:14-16, 106:14-20.

⁵⁷⁷ Maerlender Deposition, 73:14-25.

⁵⁷⁸ Maerlender Deposition, 92:7-13, 96:5-97:6; Plaintiff Michael Maerlender’s Responses and Objections to Defendants’ First Set of Interrogatories, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 October 19, 2022 (“Plaintiff Michael Maerlender’s Responses and Objections to Defendants’ First Set of Interrogatories”), p. 4.

⁵⁷⁹ Maerlender Deposition, Exhibit 16. The rankings in Exhibit 16 of the Maerlender Deposition are based on the USN&WR Best National Universities and National Liberal Arts Colleges rankings from the year Maerlender applied to the schools.

⁵⁸⁰ Maerlender Deposition, 98:16-99:7, 150:3-20, Exhibit 10. Mr. Maerlender testified that he would have relied on a ranking such as that offered by Niche, which publishes an annual ranking of schools based on the quality of their performing arts and theater programs. *See also* “2024 Best Colleges for Performing Arts in America,” NICHE, 2024, available at <https://www.niche.com/colleges/search/best-colleges-for-theater/>, accessed July 10, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Maerlender “learned to disregard the rankings” as his “own preferences and needs were different than how rankings were determined,” especially for theater programs.⁵⁸¹ Mr. Maerlender was accepted to Vanderbilt, University of Nebraska-Lincoln, and Trinity College.⁵⁸² He chose to matriculate at Vanderbilt because it was his top choice.⁵⁸³

278. Named Plaintiff Andrew Corzo considered schools based on location, prestige, and availability of academic programs. Mr. Corzo testified that he preferred schools that were in urban areas,⁵⁸⁴ and that he sought schools with a focus on humanities, social sciences, and liberal arts.⁵⁸⁵ He applied to Brown, Columbia, Georgetown, Harvard, Princeton, Chicago, UVA, and William & Mary.⁵⁸⁶ These schools are a mix of private and public universities and were ranked between 1st and 32nd in USN&WR, but Mr. Corzo mentioned that he did not consider rankings when applying.⁵⁸⁷ Mr. Corzo was accepted to Chicago and William & Mary.⁵⁸⁸ He matriculated at Chicago because it “had the focus that [he] wanted in terms of social sciences and humanities, and it was in the city.”⁵⁸⁹

⁵⁸¹ Maerlender Deposition, 98:16-99:20.

⁵⁸² Maerlender Deposition, 108:14-109:11; Plaintiff Michael Maerlender’s Responses and Objections to Defendants’ First Set of Interrogatories, p. 4.

⁵⁸³ Maerlender Deposition, 116:25-117:8, 153:15-24. Maerlender applied to Vanderbilt Early Decision II, which committed him to matriculating when he was accepted. Maerlender Deposition, 158:10-159:17.

⁵⁸⁴ Deposition of Andrew Corzo, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 September 8, 2023 (“Corzo Deposition”), 78:6-10.

⁵⁸⁵ Corzo Deposition, 71:4-21.

⁵⁸⁶ Corzo Deposition, 101:15-19; Plaintiff Andrew Corzo’s Supplemental Responses and Objections to Defendants’ First Set of Interrogatories, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 June 28, 2023 (“Plaintiff Andrew Corzo’s Supplemental Responses and Objections to Defendants’ First Set of Interrogatories”) pp. 4-5.

⁵⁸⁷ These rankings are from the Best National Universities ranking from USN&WR in 2014. See Williams Deposition, Exhibit 10; Corzo Deposition, 93:13-22.

⁵⁸⁸ Plaintiff Andrew Corzo’s Supplemental Responses and Objections to Defendants’ First Set of Interrogatories, p. 4.

⁵⁸⁹ Corzo Deposition, 105:21-106:3.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

279. Named Plaintiff Brandon Piyevesky considered multiple factors such as location (he was “interested in attending colleges in bigger cities”), the pre-med program, reputation, campus culture, and on-campus living accommodations when choosing schools.⁵⁹⁰ For example, Mr. Piyevesky applied to Northwestern because of its location, pre-med academic track, and “elite status.”⁵⁹¹ Mr. Piyevesky applied to Brown, Case Western, Northwestern, Ohio State, Penn, Washington University in St. Louis, and Yale.⁵⁹² These schools are a mix of private and public universities, and were ranked between 3rd and 52nd in USN&WR.⁵⁹³ While Mr. Piyevesky did not explicitly consider rankings when selecting schools, Mr. Piyevesky testified that he considered the “elite status” of Northwestern when applying.⁵⁹⁴ Mr. Piyevesky was accepted at Northwestern, Ohio State, and Case Western.⁵⁹⁵ Mr. Piyevesky testified that he ultimately chose to matriculate at Northwestern, not just because of its “elite status,” but also because it was “one of [his] few dream schools at the time.”⁵⁹⁶

280. Named Plaintiff Benjamin Shumate considered academic quality, location, and student life when selecting schools to which to apply.⁵⁹⁷ He applied to Syracuse University because he

⁵⁹⁰ Deposition of Brandon Piyevesky, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 August 28, 2023 (“Piyevesky Deposition”), 28:23-29:18, 32:12-33:14.

⁵⁹¹ Piyevesky Deposition, 39:21-40:3.

⁵⁹² Plaintiff Brandon Piyevesky’s Supplemental Responses and Objections to Defendants’ First Set of Interrogatories, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 January 4, 2023 (“Plaintiff Brandon Piyevesky’s Supplemental Responses and Objections to Defendants’ First Set of Interrogatories”), p. 4.

⁵⁹³ Piyevesky Deposition, 39:21-40:3. These rankings are from the Best National Universities ranking from USN&WR in 2014. *See* Williams Deposition, Exhibit 10.

⁵⁹⁴ Piyevesky Deposition, 39:21-40:3, 86:19-87:3.

⁵⁹⁵ Plaintiff Brandon Piyevesky’s Supplemental Responses and Objections to Defendants’ First Set of Interrogatories, p. 4.

⁵⁹⁶ Piyevesky Deposition, 86:19-87:3.

⁵⁹⁷ Deposition of Benjamin Shumate, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 September 12, 2023 (“Shumate Deposition”), 107:11-20.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

was interested in their school of public policy,⁵⁹⁸ University of Denver because “it was relatively close to where [he] grew up, and it was located in a city [he] had visited many times,”⁵⁹⁹ and University of Wyoming because his parents and others he knew were alumni.⁶⁰⁰ Mr. Shumate also applied to Brown, Stanford University, Duke, and Michigan State University.⁶⁰¹ The schools that Mr. Shumate applied to include a mix of public and private universities ranked between 5th and 161st in USN&WR.⁶⁰² Mr. Shumate was accepted to Brown, University of Wyoming, Michigan State University, University of Denver, and Syracuse University.⁶⁰³ He matriculated at Brown ultimately because it is “highly regarded academically” and because of its open curriculum.⁶⁰⁴

281. Each Named Plaintiff prioritized combinations of different factors that resulted in them considering different sets of schools, including a mix of public universities, liberal arts colleges, private regional universities, private national universities outside the top 25 USN&WR rankings, and Defendants. Therefore, the same can be expected for many, if not all, members of the proposed class. Artificially restricting the set of relevant competitors to the USN&WR top 25 private national universities, as Dr. Singer does, fails to capture

⁵⁹⁸ Shumate Deposition, 150:3-14.

⁵⁹⁹ Shumate Deposition, 158:15-23.

⁶⁰⁰ Shumate Deposition, 134:10-15.

⁶⁰¹ Plaintiff Benjamin Shumate’s Supplemental Responses and Objections to Defendants’ First Set of Interrogatories, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 June 27, 2023 (“Plaintiff Benjamin Shumate’s Supplemental Responses and Objections to Defendants’ First Set of Interrogatories”), p. 4.

⁶⁰² These rankings are from the Best National Universities ranking from USN&WR in 2014. *See* Williams Deposition, Exhibit 10.

⁶⁰³ Plaintiff Benjamin Shumate’s Supplemental Responses and Objections to Defendants’ First Set of Interrogatories, p. 4.

⁶⁰⁴ Shumate Deposition, 181:23-182:3.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

many schools that proposed class members likely considered attending, and the personal reasons for their ultimate selection of the school they chose to attend.

D. Dr. Singer's Reliance on a Rankings Cutoff from USN&WR Does Not Reflect Industry or Academic Consensus

282. As discussed throughout **Sections VI.A-C**, Dr. Singer's use of an arbitrary set of USN&WR top 25 private national universities to define his proposed relevant market fails to contend with the dynamics of competition in higher education, in which students apply to and matriculate at a variety of schools and regularly consider public universities, liberal arts colleges, and private universities alongside each other. Dr. Singer's proposed relevant market is also not reflected in academic literature studying the higher education industry.
283. In my own research on financial aid policies used by highly selective colleges and universities, I have relied on Barron's *Guide to Colleges* instead of USN&WR and have included schools outside of Dr. Singer's proposed relevant market in my analyses.⁶⁰⁵ Barron's Guide groups schools based on their selectivity, which is measured by incoming students' grades and test scores, into categories such as "Most Competitive," "Highly Competitive Plus," "Highly Competitive," and "Very Competitive Plus."⁶⁰⁶ Specifically, in my research I have used the "Most Competitive" and "Highly Competitive" categories from Barron's Guide to identify colleges and universities that are "highly selective" and to

⁶⁰⁵ Long (2011), pp. 240-242.

⁶⁰⁶ Barron's periodically publishes a list of the most competitive or selective schools in the U.S., classifying the schools into different categories of competitiveness or selectivity. *See, for example*, Leonhardt, David, "What Makes a College 'Selective' — and Why It Matters," The New York Times, April 4, 2013, available at <https://archive.nytimes.com/economix.blogs.nytimes.com/2013/04/04/what-makes-a-college-selective-and-why-it-matters/>, accessed July 28, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

evaluate representation of low-income students at those schools.⁶⁰⁷ My research focuses on this set of schools because these schools tend to have higher expenditures per student and produce better outcomes for students than other schools.⁶⁰⁸ This set of schools is approximately consistent with the top 50 USN&WR for universities (both public and private) and liberal arts colleges—including several schools that are similar to Defendants but are artificially excluded from Dr. Singer's proposed relevant market.

284. My approach is consistent with those of other researchers. Relying on the 2008 edition of Barron's Guide, Hoxby and Avery (2013) includes 236 schools from the categories of "Very Competitive Plus" to "Most Competitive" to study low-income students' application rates to selective schools.⁶⁰⁹ Hoxby and Avery (2013) notes that private and public selective colleges "are eager to make their student bodies socioeconomically diverse without enrolling students who are unprepared for their demanding curricula," and these schools thus compete for high-achieving, low-income students through admissions and financial aid policies.⁶¹⁰ Hoxby and Avery (2013) thus includes public universities and liberal arts colleges, as well as schools ranked outside of the USN&WR top 25, contrary to Dr. Singer's proposed relevant market. In another paper, Cheslock and Riggs (2023), which Dr. Singer cites to justify his own reliance on USN&WR rankings, emphasizes that the relevant distinction is between "elite" and "non-elite" schools instead of the top 25 private

⁶⁰⁷ Long (2011), p. 240.

⁶⁰⁸ Long (2011), p. 232, 240.

⁶⁰⁹ Hoxby, Caroline M. and Christopher Avery, "The Missing 'One-Offs': The Hidden Supply of High-Achieving, Low Income Students," *The Brookings Institution*, Vol. 44, No. 1, 2013, p. 2.

⁶¹⁰ Hoxby and Avery (2013), p. 5.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

research schools and others.⁶¹¹ Cheslock and Riggs (2023) defines “non-elite” schools as “those outside of the top 50 in the U.S. News rankings of liberal arts college and universities,” and notably includes both private national universities and liberal arts colleges.⁶¹² The authors rely on findings from Grawe (2018) and Cheslock and Riggs (2021) that note differences in student demand for elite and non-elite schools.⁶¹³ Cheslock and Riggs (2023) thus includes liberal arts colleges, unlike Dr. Singer.

285. Other academic researchers also rely on Barron’s Guide as opposed to USN&WR. Rose and Sorensen (1992) empirically studies the relationship between tuition and financial aid among 502 private higher education institutions.⁶¹⁴ The authors include a range of both national and regional private universities and liberal arts colleges, but exclude schools that do not grant baccalaureate degrees or schools with specialized missions, such as theological seminaries.⁶¹⁵ In their empirical analysis, the authors use Barron’s Guide to control for school selectivity, but they acknowledge that “no single variable can fully reflect institutional quality.”⁶¹⁶ Despite citing to Rose and Sorensen (1992), Dr. Singer does not

⁶¹¹ Singer Report, ¶ 67; Cheslock, John and Sam Riggs, “Ever-Increasing Listed Tuition and Institutional Aid: The Role of Net Price Differentials by Year of Study,” *Educational Evaluation and Policy Analysis*, 2023, p. 10.

⁶¹² Cheslock and Riggs (2023). I note that Cheslock and Riggs separated public schools from their analysis of elite schools due to differing levels of pricing autonomy compared to private schools.

⁶¹³ Cheslock and Riggs (2023), p. 23.

⁶¹⁴ Rose, David and Robert Sorensen, “High Tuition, Financial Aid, and Cross-Subsidization: Do Needy Students Really Benefit?,” *Southern Economic Association*, Vol. 59, 1992, pp. 66-67.

⁶¹⁵ Rose and Sorensen (1992), pp. 69, 71.

⁶¹⁶ Rose and Sorensen (1992), p. 69. Rose and Sorenson also excluded public universities from Barron’s Guide’s index, but this was solely for the purposes of their empirical analysis. The authors state that inclusion of public schools would “reduce the efficiency of [the authors’] coefficient estimates” (p. 71). The exclusion of public universities in this paper is not related to the conception of institutional competition.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

engage with the authors' use of a different measure from USN&WR rankings to identify schools to study.⁶¹⁷

286. Dr. Singer's proposed definition of the relevant market therefore does not reflect how schools, students, or academic researchers conceive of school peer groups, nor does it reflect the way in which schools compete for the enrollment of admitted students.

VII. THE PURPOSE OF MANAGING ENDOWMENTS IS TO MAINTAIN STABLE FUNDING TO SUPPORT SCHOOLS' MISSIONS OVER THE LONG TERM

287. As described in **Section II**, each Defendant, as well as many of their peers, devotes substantial financial resources to providing a high-quality educational experience for their students, and heavily subsidizes the educational experience for the vast majority of their students. Each Defendant makes large investments in a range of academic departments, student support programs, and facilities, and works hard to attract and retain highly qualified faculty along with other professional staff who support the student experience. As I will describe in this section, endowments are a critical source of funding each Defendant relies on not only to fund these important investments over the long term, but also to make capital improvements, build resources in emerging academic fields, and adapt to the changing needs and interests of their students over time. The goal of an endowment is to provide a school with long-term financial stability to support its educational and societal mission.

288. Plaintiffs' experts place a large focus on Defendants' endowments, including Ms. Mora's discussion of revenue sources and restrictions on endowments, Dr. Bulman's analysis of

⁶¹⁷ Singer Report, ¶ 69.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

“excess returns” and Defendants’ ability to spend more from their endowments, and Dr. Singer’s discussion of “endowment hoarding” and analyses of “excess returns.”⁶¹⁸ These analyses and opinions fail to account for the role and function of endowments, in particular in providing stable funding for institutional spending, much of which requires long-term investments. Because of the need for stability, volatile “excess returns” cannot be relied upon as a revenue source to fund additional financial aid.

A. Endowments Are Complex Financial Portfolios Often Subject to Specific Rules and Restrictions

1. A Description of Endowments

289. Endowments derive from charitable donations, also called voluntary support, which are an important source of funding for higher education.⁶¹⁹ Gifts may be used for current operations meaning that the gift is available for use immediately and may be spent in its entirety.⁶²⁰ Alternatively, a gift can be used to fund an endowment, which is a collection of gifts of money or property to a non-profit organization that is invested to create a future stream of income that the non-profit can use for designated purposes.⁶²¹ In higher education, the annual return on the investment of the endowment contributes to a school’s

⁶¹⁸ Mora Report, ¶¶ 32-57, 67-68; Bulman Report, p. 5; Singer Report, ¶¶ 56, 70, 241-247.

⁶¹⁹ *See, for example*, “Giving to U.S. College and Universities at \$58 Billion in Fiscal Year 2023,” CASE, February 21, 2024, available at <https://www.case.org/resources/giving-us-college-and-universities-58-billion-fiscal-year-2023>, accessed July 25, 2024.

⁶²⁰ *See, for example*, “Current Use Gifts and Endowments,” Harvard School of Engineering and Applied Sciences, available at <https://seas.harvard.edu/office-finance/accounting/current-use-gifts-and-endowments>, accessed September 15, 2023; “Current Use and Endowed Gifts-What’s the Difference?,” Georgetown University, available at <https://giving.georgetown.edu/current-use-vs-endowment/>, accessed December 7, 2023.

⁶²¹ *See, for example*, “Understanding the Endowment,” Brown University, available at <https://investment.brown.edu/endowment/understanding-endowment>, accessed May 7, 2024; Calabrese, Thad D. and Todd L. Ely, “Understanding and Measuring Endowment in Public Charities,” *Nonprofit and Voluntary Sector Quarterly*, Vol. 46, No. 4, 2017, p. 1.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

annual operating budget. An expectation of these returns, using modest assumptions, is used to support investment in long-term initiatives (e.g., professorships, financial aid policies, research institutes, or capital projects).⁶²²

290. Importantly, endowments are designed to support a school and its mission in perpetuity.⁶²³ Endowments strive to generate high enough returns to cover an annual distribution, or withdrawal, without dipping into the principal.⁶²⁴ This approach ensures the long-term sustainability and growth of the endowment necessary due to inflation, and thus aims to create an ongoing stream of support for the designated purpose.⁶²⁵ Stated another way, an endowment fund is established with the intent of preserving the original gift in perpetuity while still advancing a specific purpose or initiative. This aim has often meant that many schools primarily derived distributions from investment returns rather than principal.
291. Between 2006 and 2012, almost all states and the District of Columbia adopted laws, modeled on the Uniform Prudent Management of Institutional Funds Act (“UPMIFA”), that govern the management of funds donated to charitable institutions.⁶²⁶ The UPMIFA

⁶²² “Understanding College and University Endowments,” American Council on Education, 2021, available at <https://www.acenet.edu/Documents/Understanding-College-and-University-Endowments.pdf>, accessed September 22, 2023, p. 8.

⁶²³ “Endowment Fundamentals,” NACUBO, May 14, 2021, available at <https://learn.nacubo.org/products/endowment-fundamentals>, accessed August 4, 2024.

⁶²⁴ Guido, Michael et al., “Commonfund on the Road: Insights from our Seattle Roundtable,” Commonfund, July 10, 2023, available at <https://www.commonfund.org/blog/commonfund-on-the-road-insights-from-our-seattle-roundtable>, accessed August 4, 2024.

⁶²⁵ Greene, Randy L., “Endowment Management,” College and University Business Administration, 2016, available at <https://nacubo.inmagic.com/Presto>, accessed August 5, 2024, pp. 2-3.

⁶²⁶ “Prudent Management of Institutional Funds Act: Map,” Uniform Law Commission, available at <https://www.uniformlaws.org/committees/community-home?communitykey=043b9067-bc2c-46b7-8436-07c9054064a3>, accessed September 22, 2023. UPMIFA has been enacted in all states except for Pennsylvania where there is a separate but similar law that limits spending to between 2 percent and 7 percent of total endowment. “Associations Code (15 PA.C.S.) and Probate, Estates and Fiduciaries Code,” *141*, ed. Assembly, Pennsylvania General (1998).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

guidelines reinforce that only the income (that is, income from the returns or capital growth) generated by investing endowed funds should be spent.⁶²⁷ This means the principal amount is often kept intact, and it is the income generated from investing the endowment, not the principal itself, that is used to support the school.⁶²⁸ Many donors also require that the principal be held in perpetuity.⁶²⁹

292. **Figure 12** below provides an overview of how endowment funds are often managed in four stages, in a scenario where there is a positive return high enough to cover the school's annual distribution: (1) the endowment is made up of a collection of gifts to be invested; (2) the gifts generate an investment return; (3) the investment return is used to pay an annual distribution with any appreciation in excess of the annual distribution being reinvested; and (4) the school receives new gifts which are added to the endowment to be invested.⁶³⁰

⁶²⁷ "Uniform Prudent Management of Institutional Funds Act," National Conference of Commissioners on Uniform State Laws, November 8, 2007, available at <https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=d88fe964-fa49-9b1e-e197-2389fcc49990&forceDialog=0>, accessed September 22, 2023, p. 21 ("When the institution considers the purposes and duration of the fund, the institution will give priority to the donor's general intent that the fund be maintained permanently. Although the Act does not require that a specific amount be set aside as 'principal,' the Act assumes that the charity will act to preserve 'principal' (i.e., to maintain the purchasing power of the amounts contributed to the fund) while spending 'income' (i.e., making a distribution each year that represents a reasonable spending rate, given investment performance and general economic conditions).").

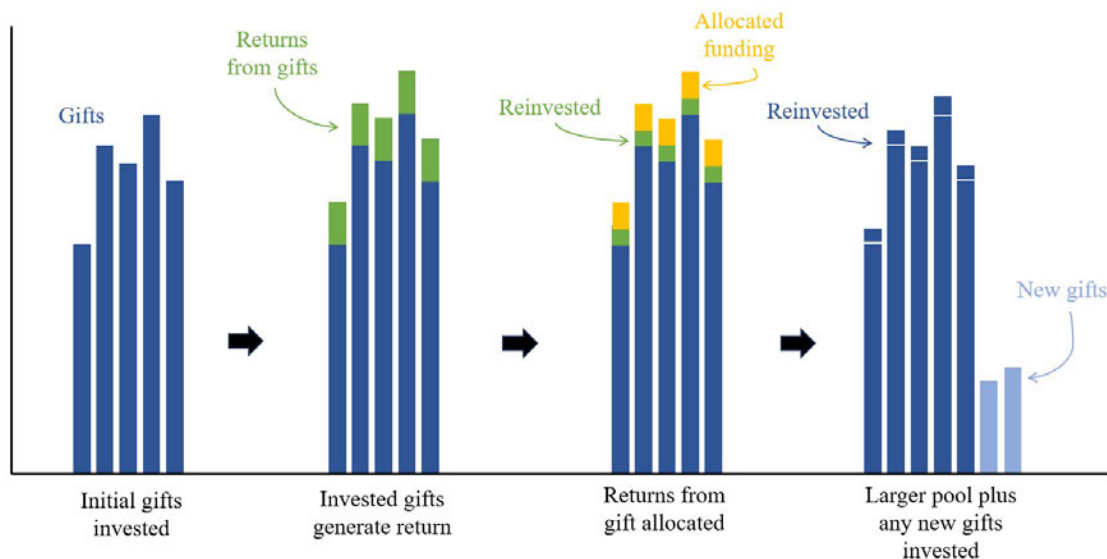
⁶²⁸ These investment returns cannot simply be withdrawn like a savings account. Instead, endowments are made up of many smaller funds that include liquid and illiquid assets. "Key Factors in Asset Allocation Decisions for Endowments," Commonfund, December 1, 2023, available at <https://www.commonfund.org/blog/key-factors-in-asset-allocation-decisions-for-endowments>, accessed July 7, 2024.

⁶²⁹ Greene, "Endowment Management," College and University Business Administration, 2016, available at <https://nacubo.inmagic.com/Presto>, accessed August 5, 2024, p. 3.

⁶³⁰ "Endowment," Harvard University, available at <https://www.harvard.edu/about/endowment>, accessed September 22, 2023; "Endowment Payout Process," Stanford University, May 1, 2023, available at <https://fingate.stanford.edu/managing-funds/endowment-payout-process>, accessed September 22, 2023; "Endowments," National Council of Nonprofits, available at <https://www.councilofnonprofits.org/running-nonprofit/fundraising-and-resource-development/endowments>, accessed September 22, 2023. *See, for example*, "California Institute of Technology Financial Statements for the Years Ended September 30, 2023 and 2022," PricewaterhouseCoopers, January 24, 2024, available at <https://finance.caltech.edu/Resources/financials>, accessed June 5, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Figure 12
Schematic Representation of Endowment Funds



293. Each school decides how best to manage its endowment. The distinct processes of investing endowment funds and determining endowment distributions are typically separate at schools such as Defendants, and decided by different decision makers.⁶³¹ Investment decisions may be managed internally through an investment committee or an affiliated management company, may be outsourced to third-party consultants or investment firms, or may be made using a combination of approaches.⁶³² Endowment distributions are typically determined by schools' governing boards. The governing board will generally establish multi-year endowment spending policies, guided by standards of prudence such

⁶³¹ Fishman, James, "What Went Wrong: Prudent Management of Endowment Funds and Imprudent Endowment Investing Policies," *Journal of College and University Law*, 2014, p. 234.

⁶³² "Understanding College and University Endowments," American Council on Education, 2021, available at <https://www.acenet.edu/Documents/Understanding-College-and-University-Endowments.pdf>, accessed September 22, 2023, p. 8 ("Some institutions manage their endowments with their own staff; others rely on their trustees, contract with professional managers, or use a combination of approaches.").

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

as those laid out by UPMIFA, to balance the need for current income with both medium-term stability and long-term purchasing power for future generations.⁶³³

2. *Restricted Uses of Endowments*

294. Endowments do not function like savings accounts, from which one can withdraw money at any time for any purpose. One reason for this is that endowments are often gifts designated for specific purposes, and so there are restrictions on how (e.g., a professorship, student scholarship, or research institute) and when the funds can be used.⁶³⁴ Even when endowments are unrestricted, the practical reality is that unrestricted endowments are sometimes earmarked during annual budgetary processes to serve a certain purpose year after year. For example, Notre Dame earmarks some of its unrestricted endowment for operation of its power plant.⁶³⁵
295. Based on my years of experience as a faculty member and my focus on fundraising as a higher education administrator during the last decade, I have observed that it is quite common for donors in higher education to dictate the general area or purpose to which they would like their gift applied. For example, during my time as the leader of HGSE, we had annual campaigns to encourage the graduating cohort of students to make donations that

⁶³³ Brown, Keith et al., "The Troves of Academe: Asset Allocation, Risk Budgeting, and the Investment Performance of University Endowment Funds," *McCombs Research Paper Series*, 2008, p. 5. "Uniform Prudent Management of Institutional Funds Act," National Conference of Commissioners on Uniform State Laws, November 8, 2007, available at <https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=d88fe964-fa49-9b1e-e197-2389fcc49990&forceDialog=0>, accessed September 22, 2023.

⁶³⁴ "Understanding College and University Endowments," American Council on Education, 2021, available at <https://www.acenet.edu/Documents/Understanding-College-and-University-Endowments.pdf>, accessed September 22, 2023, pp. 3-4.; Berman, Julien, "Unhedge University Funds," *The Harvard Crimson*, April 11, 2023, available at <https://www.thecrimson.com/column/toward-a-higher-higher-education/article/2023/4/11/berman-harvard-endowment-spending/>, accessed June 5, 2024.

⁶³⁵ Affleck-Graves Deposition, 36:16-37:5, 38:21-39:11.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

would be allocated to help fund financial aid for future students. Cornell similarly launched a campaign in 2021 with specific goals devoted to raising money for financial aid, academic programs, endowed professorships, research, and clinical care.⁶³⁶ For much larger gifts, donors sometimes express more specific preferences on how their gift will be used. Potential donors of large gifts usually require extensive conversations about exactly how their money will be used and how it will impact the school, usually with a focus on advancing a specific part of a school's mission. Additionally, as part of their stewardship function, schools provide most current donors with detailed reports regarding the use, growth, and distribution of their endowments. In my role as a higher education administrator, I was involved in assembling and approving many stewardship reports, and increasing my school's capacity to produce high-quality stewardship materials was a priority that resulted in improving relationships with donors, and in some cases, attracting additional gifts.

296. This observation from my professional experience is confirmed by the Council for Advancement and Support of Education ("CASE"), the industry leader in tracking trends in philanthropic support for higher education institutions in the United States. Their most recent report notes that large gifts are often allocated to fund endowments, and a large proportion "of this endowed support is targeted by donors to fund student financial aid,

⁶³⁶ Kelley, Susan, "Cornell Launches \$5B Campaign 'To Do the Greatest Good'," Cornell Chronicle, October 22, 2021, available at <https://news.cornell.edu/stories/2021/10/cornell-launches-5b-campaign-do-greatest-good>, accessed August 4, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

academic divisions, and faculty and staff compensation,”⁶³⁷ which are three of the major categories of spending related to each Defendant’s mission.

297. If a donor places restrictions on how the funds can be spent, the school cannot use the returns on those funds to sponsor other activities, with the exception of shared charges for expenses such as funds management.⁶³⁸ These restrictions may be highly specific. For example, the Patricia Gerick Memorial Fund was established to honor the late MIT-Japan managing director, who was known to have a passion for Japanese culture and history. The fund provides supplemental stipends for students participating in the MIT-Japan internship program.⁶³⁹ In another example, the Margaret Courtenay Stone Memorial Book Endowment Fund was established by friends and family to honor Meg Stone, a student at Georgetown who passed away in 1978 in a car accident. Income from this fund is used to purchase books on government, her area of study while at Georgetown.⁶⁴⁰

3. One Cannot Assume that a “Substantial Portion” of Restricted Endowment Funds Could Be Accessed by Any Defendant for Unapproved Reasons

298. Ms. Mora opines that “a *substantial portion* of the distributions from [Defendants’] restricted endowments funds were not really ‘restricted,’” because, in some cases, donors

⁶³⁷ “Giving to U.S. College and Universities at \$58 Billion in Fiscal Year 2023,” CASE, February 21, 2024, available at <https://www.case.org/resources/giving-us-college-and-universities-58-billion-fiscal-year-2023>, accessed July 25, 2024.

⁶³⁸ Greene, “Endowment Management,” College and University Business Administration, 2016, available at <https://nacubo.inmagic.com/Presto>, accessed August 5, 2024, p. 3.

⁶³⁹ “Patricia Gercik Fund,” MISTI - MIT Global Experiences, available at <https://misti.mit.edu/memory-patricia-gercik>, accessed August 4, 2024.

⁶⁴⁰ “Margaret Courtenay Stone Memorial Book Endowment Fund,” Georgetown University Library, available at <https://library.georgetown.edu/giving/endowments/stone>, accessed July 7, 2024; Associates, Georgetown University Library, “Newsletter 12,” October 1980, available at <https://repository.library.georgetown.edu/bitstream/handle/10822/551066/LibraryAssociatesNewsletter12.pdf>, accessed July 7, 2024, p. 3.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

did not restrict the spending of the returns on a restricted principal or were willing to lift restrictions if asked.⁶⁴¹ Ms. Mora arrives at these opinions with no support from record evidence, literature, or data. She simply opines that it is her “understanding based on [her] extensive interactions with financial officers of elite universities, and review of their annual reports, that the [same] was also true at Defendants.”⁶⁴² Ms. Mora says nothing to indicate that she has evaluated the individual circumstances of each Defendants’ endowments and other financing processes. In my experience, it is often challenging to secure approval for deviations from approved or contractually-specified restrictions on the use of endowment funds.

299. First, as discussed, some donations require that only the income generated by a restricted endowment can be used to fund the designated purpose of that endowment and that the school maintain the principal donated.⁶⁴³ In such circumstances, when money from a restricted endowment is spent for the specific purpose the donor stipulated, it will come from income generated by the endowment rather than from the endowment principal.⁶⁴⁴ I am not aware of any data from the Defendants, and Ms. Mora has identified none, supporting the notion that Defendants had restricted endowments that did not restrict the spending of returns, let alone that such endowments were so prevalent as to constitute a “substantial portion” of distributions. In my experience, even if one were technically permitted to spend down an endowed fund’s principal, it would be impractical and

⁶⁴¹ Mora Report, ¶ 49 (emphasis added).

⁶⁴² Mora Report, ¶ 50.

⁶⁴³ Greene, “Endowment Management,” College and University Business Administration, 2016, available at <https://nacubo.inmagic.com/Presto>, accessed August 5, 2024, p. 3.

⁶⁴⁴ Deposition of Paul Streeter, Vice President for Budget and Planning at Cornell University, *Henry, et al. v Brown University, et al.*, 1:22-cv-00125 January 26, 2024 (“Streeter Deposition”), 72:16-73:5.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

imprudent to do so because spending down the principal undermines the primary goal and assumption of maintaining endowed funds in perpetuity to support the school's mission.

300. Second, Ms. Mora has not indicated consideration of, nor accounted for, the ease or difficulty of changing restrictions on individual Defendants' specific restricted endowments, nor any donor-specific or legal ramifications of attempting to change these restricted endowments. Ms. Mora ignores the critical steps that are, in my experience, often required to modify a restricted fund. Modifying restrictions is likely to require more than a simple request for permission from a donor.⁶⁴⁵ It is typically a complex process that may be costly depending on the legally binding nature of the agreement between the donor and the school. The few times I have witnessed Harvard endeavor to modify a restriction, it has been for older endowed funds whose specific purpose arguably was no longer as relevant as it was when the fund was created—for example, where a decades-old fund was originally endowed to sponsor research in a since-abandoned field.

301. Concerns about the difficulty in changing a restricted endowment also formed the basis of important advice I received when I became a higher education leader. I received mentorship from the President of Harvard, who had also previously served as the President of Tufts University and Chancellor of MIT. He shared many examples of when a gift resulted in limiting the actions of a school due to restrictions imposed by a donor. In such cases, the school was still required to follow the instructions of the donor and expend funds on a particular initiative even when it was no longer an institutional priority. He cautioned

⁶⁴⁵ Mora Report, ¶ 49.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

me to be very careful in agreeing to restrictive terms for gifts because of just how difficult it is to change the terms at a future date.

B. Plaintiffs' Concept of "Excess Returns" on Endowments Cannot Be Relied Upon for Institutional Expenditure Decisions

302. The Bulman and Singer Reports define "excess returns" on endowments as those that exceed the target spending rate from the endowment and inflation over a three-year period.⁶⁴⁶ Dr. Bulman implies that Defendants could have (or should have) used so-called excess returns to fund additional financial aid.⁶⁴⁷ Dr. Bulman writes that his analysis shows "[a]ll Defendants could have substantially increased their institutional aid during the Class Period while increasing the purchasing power of their endowments."⁶⁴⁸ Dr. Bulman further writes, "[h]ad Defendants not charged any tuition for each and every institutional aid recipient during the post-2003 period covering years of the Challenged Conduct, Defendants' endowments would have grown by 112%" and "Defendants' endowments also would continue to grow substantially ten years into the future, through 2032."⁶⁴⁹ Dr. Singer, meanwhile, implies that Defendants could have (or should have) used so-called excess returns to fund additional financial aid, saying "[o]ther things being equal, the higher the three-year moving average excess return in any year, the more resources the Defendants would have to devote to [need-based] institutional grant aid[.]"⁶⁵⁰

⁶⁴⁶ Bulman Report, ¶ 33; Singer Report, ¶ 241.

⁶⁴⁷ Bulman Report, ¶ 54.

⁶⁴⁸ Bulman Report, ¶ 9c.

⁶⁴⁹ Bulman Report, ¶¶ 9c, 65.

⁶⁵⁰ Singer Report, ¶ 241.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

303. As I will discuss in this section, Plaintiffs' experts' opinions demonstrate clear hindsight bias. In any given year, "excess returns" cannot be reliably factored into Defendants' contemporaneous annual budget projections for planning purposes because Defendants would not have the benefit of Dr. Bulman's and Dr. Singer's hindsight at the time they were making spending decisions. Short-run increases in returns are not sufficient to cover long-term spending commitments and administrators cannot assume past "excess returns" will be sustained in the future to cover new commitments.

1. Endowments Are an Important Source of Revenue to Support Defendants' and Their Peers' Missions Over the Long Term

304. Endowments are an important source of revenue to support schools' operating expenditures and individual missions over the short and long term. As discussed in **Section II.A** above, Defendants spend more than they earn from tuition and fees and must make up the difference with other sources of revenue, including revenue from endowment disbursements.⁶⁵¹ As a result, managing a school's endowment and endowment growth is critical to the longevity of the school, as this ensures that the school can continue to provide services below marginal cost.

305. Many spending decisions that schools make are long-term commitments. As discussed in **Section II.A** above, in pursuit of their missions, Defendants and their peers dedicate financial resources to support a wide range of activities that enhance the quality of

⁶⁵¹ Endowment revenue is a major source of revenue. *See, for example*, "University of Pennsylvania Consolidated Financial Statements," PricewaterhouseCoopers, September 22, 2022, available at <https://www.finance.upenn.edu/wp-content/uploads/Penn-Division-of-Finance-FY22-Annual-Report.pdf>, accessed August 1, 2024, pp. 4, 12; Satterfield, Rachel L., "Duke University Financial Statements 2021/2022," KPMG, October 4, 2022, available at <https://finance.duke.edu/resources/docs>, accessed December 11, 2023, pp. 5, 8. Kirshtein, Rita J. and Steven Hurlburt, "Revenues: Where Does the Money Come From?," American Institute for Research, 2012, pp. 1-2.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

education but are costly and not always expected to generate revenues. These activities, including a large number of academic programs, highly qualified and accomplished faculty and their research, facilities and infrastructure, student affairs staff and resources, and financial aid are all long-term financial commitments as I detail below.

306. *A large number of wide-ranging academic programs.* Supporting academic programs is a long-term commitment. Specific academic programs may rely heavily on endowment revenue to operate. For example, Harvard's Faculty of Arts and Sciences drew 52 percent of its operating revenue from endowment income in fiscal year 2022,⁶⁵² and 29 percent of Cornell's endowment was held for academic programs and research in fiscal year 2022.⁶⁵³ As described in **Section II.A** above, Defendants and their peers make decisions to support a variety of different academic programs that represent the needs and interests of their students, even if a particular program does not represent the needs and interests of the majority of, or even many, students. Supporting academic programs is a long-term commitment as students expect courses and majors to be available from when they apply to when they graduate, and research requires a long-term view to develop, build on, and learn from findings. The stable and long-term funding for academic programs is critical to each Defendant's core mission of providing a high-quality education. Should a Defendant lose or decrease long-term funding for these programs (e.g., as a result of poor endowment management) the school would risk decreasing the quality of the education provided as a

⁶⁵² Bacow, Lawrence S. et al., "Harvard University Financial Report for Fiscal Year 2022," PricewaterhouseCoopers, October 12, 2022, available at <https://finance.harvard.edu/annual-report>, accessed December 11, 2023, p. 6.

⁶⁵³ Cornell's "total true endowment and FFE [fund functioning as endowment]" was \$9,128,519 in fiscal year 2022, of which \$2,662,782 was held for academic programs and research (i.e., \$2,662,782 / \$9,128,519 = 29 percent). "Cornell University Consolidated Financial Statements June 30, 2022 and 2021," PricewaterhouseCoopers, October 17, 2022, available at <https://finance.cornell.edu/controller/reporting>, accessed December 11, 2023, p. 48.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

result of students having fewer academic areas to choose from and offering courses that are not on the cutting edge of emerging fields and topics.

307. Highly qualified and accomplished faculty and their research. Hiring and sustaining accomplished faculty is a long-term commitment, particularly due to the prevalence of tenure in higher education. Tenure status means the faculty member has an indefinite appointment that can only be terminated for cause or under extraordinary circumstances.⁶⁵⁴ The vast majority of full-time instructional faculty at Cornell (75 percent), Georgetown (63 percent), MIT (74 percent), Notre Dame (71 percent), and Penn (76 percent) were tenured or on a tenure track as of Fall 2022.⁶⁵⁵ Faculty are critical for enriching each Defendant's academic environment through their research and teaching and pursuing Defendants' educational missions. Reacting to budget constraints by reducing the faculty workforce or limiting funds available for faculty to improve their curriculum—if even possible due to tenure requirements—would risk decreasing the quality of the education provided, contrary to each Defendant's educational mission. Some students would react negatively to current courses or faculty becoming suddenly unavailable, particularly if a faculty member and/or their research was one reason why the student chose the school. Such adjustments would risk decreasing the quality of the education provided, running counter to each Defendant's

⁶⁵⁴ "Tenure," American Association of University Professors, available at <https://www.aaup.org/issues/tenure>, accessed August 4, 2024.

⁶⁵⁵ There were 1,918 full-time instructional staff at Cornell of which 1,051 were tenured and 385 were on tenure track in fall 2022 (i.e., $(1,051 + 385) / 1,918 = 75$ percent). There were 1,305 full-time instructional staff at Georgetown of which 658 were tenured and 168 were on tenure track in fall 2022 (i.e., $(658 + 168) / 1,305 = 63$ percent). There were 1,404 full-time instructional staff at MIT of which 801 were tenured and 235 were on tenure track in fall 2022 (i.e., $(801 + 235) / 1,404 = 74$ percent). There were 1,282 full-time instructional staff at Notre Dame of which 695 were tenured and 214 were on tenure track in fall 2022 (i.e., $(695 + 214) / 1,282 = 71$ percent). There were 2,221 full-time instructional staff at Penn of which 1,244 were tenured and 453 were on tenure track in fall 2022 (i.e., $(1,244 + 453) / 2,221 = 76$ percent). For list of sources, see **Appendix C** (NCES Faculty Tenure).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

educational mission, and may be detrimental to competition with peer schools who also have highly qualified and accomplished faculty.

308. Facilities and infrastructure. Providing and maintaining facilities and infrastructure is a long-term commitment. Many Defendants have historical buildings that are part of their history and expensive to maintain. For example, Georgetown's Dahlgren Chapel of the Sacred Heart was dedicated in 1893 and underwent a \$7.5 million restoration project in 2012 to address structural and foundation issues.⁶⁵⁶ In addition, when a school decides to invest in a new building, it is typically with an express long-term commitment to maintain the building and its resources over time. For example, a library requires an ongoing investment in books and a laboratory requires an ongoing investment in the latest scientific technology. In 2023 MIT received a \$10 million endowment to support open access books and journals in science and technology, social sciences, arts and humanities.⁶⁵⁷ Many schools also invest in digital facilities, which require a long-term commitment to keep up with the latest technology and functionality. Should key facilities and infrastructure lose funding, a school would risk decreasing the quality of the education provided, running counter to each Defendant's educational mission.

309. Student affairs staff and resources. Supporting student affairs and resources is a long-term commitment. As discussed in **Section II.A** above, student affairs and resources are critical for enriching a student's overall college experience, and ultimately, contribute to a

⁶⁵⁶ "Dahlgren Chapel of The Sacred Heart," Georgetown University, available at <https://campusministry.georgetown.edu/dahlgren/>, accessed July 26, 2024; "Dahlgren Undergoes Restoration," Georgetown University, January 26, 2012, available at <https://www.georgetown.edu/news/dahlgren-undergoes-restoration/>, accessed July 26, 2024.

⁶⁵⁷ "The MIT Press Receives \$10 Million Endowment Gift for Open Access to Knowledge," Massachusetts Institute of Technology, May 8, 2023, available at <https://mitpress.mit.edu/the-mit-press-receives-10-million-endowment-gift-for-open-access-to-knowledge/>, accessed July 23, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

student's success at a school. Students would react negatively if the extracurricular campus activities or resources they were expecting to participate in or to have available to them for support were suddenly unavailable. Each Defendant therefore typically strives to provide stable, long-term funding for student affairs and resources. For example, Notre Dame has endowment funds established to support athletics; the Mastrovich Endowment for Excellence for Sports Science funds a collaboration between the Department of Applied and Computational Mathematics and Statistics and the Department of Athletics, that utilizes advanced analytics to optimize training, prevent injuries, and improve overall athletic and academic experiences for over 750 student-athletes.⁶⁵⁸ In another example, Penn has a Student-Athlete Experience endowment which can fund the entirety of a single student's participation in a varsity program for an entire year, including costs such as travel, equipment, nutrition, sports performance, and academic support.⁶⁵⁹ Georgetown also has a wide variety of athletic department endowments, including operating endowments that "support positions beyond team coaches in areas such as sports performance, academics, nutrition, mental health, and more."⁶⁶⁰ Outside of athletics, Northwestern uses its endowment "to enhance student life and provide support services that cater to their wellbeing and personal development," like "funding for extracurricular activities, clubs, and organizations, as well as student services such as career development centers, mental

⁶⁵⁸ McCool, Deanna, "Endowment Paves Way for Collaboration Between ACMS and Athletics," University of Notre Dame, June 22, 2017, available at <https://science.nd.edu/news-and-media/news/endowment-paves-way-for-collaboration-between-acms-and-athletics/>, accessed July 25, 2024.

⁶⁵⁹ Folan, Tim, "Student-Athlete Experience Endowments," University of Pennsylvania, 2024, available at <https://giving.upenn.edu/priorities/financial-aid-and-student-experiences/support-for-student-athletes/>, accessed July 7, 2024.

⁶⁶⁰ "Georgetown University Athletics Endowments," Georgetown University Giving, available at <https://giving.georgetown.edu/what-to-support/schools-programs/athletics/give-to-athletics/endowments/>, accessed June 27, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

health support, and other resources.”⁶⁶¹ Adjustments to student affairs staff and resources as a result of budget constraints would risk decreasing the quality of the educational experience provided and may be detrimental to competition with peer schools who have a large number of student affairs staff and resources.

310. Financial aid. Supporting students through financial aid is a long-term commitment. It is critically important to understand that investments in students must be maintained not only for one entering cohort but for all future cohorts. This ties to each Defendant’s goals of access and equity, including equity across classes. Schools are extremely reluctant to reduce financial aid generosity for future cohorts, which would have a detrimental effect on students’ trust. Increasing financial aid for one year as a result of so-called “excess returns” would not be equitable to future students who by chance happen to be at college during a financial downturn where there are no so-called “excess returns” available to provide the same level of institutional financial aid. Therefore, an increase in financial aid is treated as an increase that must be supported over the long term and into the future. One year of unexpected returns on the endowment is not enough to meet the multi-year costs of supporting students, and schools are careful to make investment changes only when they are confident they can sustain them. For example, Johns Hopkins practiced need-blind admissions internally for many years but did not publicly commit to a need-blind admissions policy until after receiving a historic gift of \$1.8 billion for financial aid, which allowed the school to be confident in making a public commitment.⁶⁶² For any individual

⁶⁶¹ “Impact: Investment Office - Northwestern University,” Northwestern University, available at <https://www.northwestern.edu/investment/impact/>, accessed August 4, 2024.

⁶⁶² Phillips Deposition, 61:10-15, 211:23-212:20. “Bloomberg’s Record Gift Helps Johns Hopkins Realize Key Goal of Need-Blind Admissions,” Johns Hopkins University, 2018, available at <https://hub.jhu.edu/2018/11/26/michael-bloomberg-historic-donation-johns-hopkins/>, accessed April 29, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

student, providing financial aid support is generally considered by schools to be at least a four-year commitment, funded by “secure” sources in order to avoid having to decrease an award a student is counting on due to institutional funding challenges in later years.⁶⁶³

311. In addition to supporting a wide range of activities that enhance the quality of education over the long term as described above, schools need long-time horizons to make capital improvements, build resources in emerging academic fields, and adapt to the changing needs and interests of their students.⁶⁶⁴ To build resources in an emerging academic field (e.g., AI), schools may first test a few course offerings, host visiting professors and postdoctoral researchers, and convene with faculty and other administrators to discuss what the new emerging academic field covers and what resources would be required to provide fulsome course offerings. Over time, schools recruit and retain professors and researchers in the emerging field (who are typically in high demand and their compensation commensurate), expand course offerings, and build the resources necessary to support students' learning in the emerging field, underscoring the importance of reliable endowment funding. Each Defendant may invest in an emerging field even when student interest is low because it is part of its educational mission to support research and intellectual conversations to better educate students and build society's knowledge base.

312. In my experience as a university administrator, long-term spending decisions are made over a very long time horizon. A place like Harvard typically takes a 50- to 100-year view

⁶⁶³ Affleck-Graves Deposition, 43:11-19, 48:19-49:3 (describing financial aid commitments to individual students as “fixed costs,” unless a student's circumstances change, and emphasizing that having “a secure source of funding” is key in order to avoid having to renege on the commitment due to unforeseen external factors such as an economic recession).

⁶⁶⁴ “Understanding College and University Endowments,” American Council on Education, 2021, available at <https://www.acenet.edu/Documents/Understanding-College-and-University-Endowments.pdf>, accessed September 22, 2023, p. 9.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

of their spending, and for my own school within Harvard, during my leadership, I took a 25- to 30-year view, which was also reflected in how my finance team framed their thinking. While I appreciate that we receive information about annual investment returns, by the time we receive those reports, I have already finalized next year's spending budget and am already in the process of executing operations.

313. Such long-term spending decisions, therefore, are not made based on reactions to so-called "excess returns" in a particular year or even over a three-year period,⁶⁶⁵ but rather based on a perspective of how the endowment can best sustain the support of current and future students, academic programs, faculty, facilities and infrastructure in perpetuity, through good times and bad. As an academic leader, I focus on my school's mission and the ways I can support that mission through careful spending choices and raising new funds, such as research grants and donor gifts.

2. Volatile "Excess Returns" Cannot Be Depended On for Decision-Making

314. Dr. Singer's and Dr. Bulman's suggestion that Defendants could have spent more from their endowments due to "excess returns" suffers from hindsight bias with respect to the actual available pool of spendable money, and fails to contend with the long-run nature of institutional spending decisions. Short-term "excess returns" cannot be reliably factored into budget projections for planning purposes.
315. Both investment returns and inflation are known only once they occur. As a school sits today and makes budgeting decisions for future years, the school does not have perfect

⁶⁶⁵ Plaintiffs' experts define "excess returns" on endowments as those that exceed the target spending rate from the endowment and inflation over a three-year period. Bulman Report, ¶¶ 33, 38; Singer Report, ¶ 241.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

foresight into investment returns or inflation in the coming years. The experience of recent years highlights this point and shows why schools must exercise caution. Economic recessions and downturns in the market are often unexpected, and schools cannot assume that returns will continue to grow larger every year or that inflation will remain steady indefinitely.

316. Investing in the market, by definition, entails taking on some risk in order to have a return, and so schools cannot simply assume high future returns. Dips in endowment returns are commonly concurrent with dips in gifting to schools, compounding the financial impact a school might feel in a downturn. For example, in the wake of COVID-19 in 2020, the average value of new endowment gifts for schools with endowments over \$1 billion dropped by approximately nine percent.⁶⁶⁶
317. Because financial markets (and therefore investment returns) are volatile and schools such as Defendants depend significantly on their endowments, which are tied to investment returns, schools must balance short-term volatile financial markets with the need to preserve long-term purchasing power.⁶⁶⁷ In the absence of perfect foresight, schools must use estimates based on average and past returns as well as expected inflation to project future budgets that preserve purchasing power.⁶⁶⁸ This results in schools continuously increasing expenditures at a measured rate relative to fluctuating endowment returns.

⁶⁶⁶ “Study of Endowments,” NACUBO-TIAA, 2020, available at <https://www.nacubo.org/Research/2022/Public-NTSE-Tables>, accessed September 22, 2023, p. 4. Percent decrease in new gifts for respondents with over \$1 billion in endowments calculated as \$77,291,000 average value of new gifts in 2020 minus \$85,098,000 average value of new gifts in 2019, divided by \$85,098,000 average value of new gifts in 2019.

⁶⁶⁷ Blume, Marshall, “Endowment Spending in Volatile Markets: What Should Fiduciaries Do?,” *Review of Quantitative Finance and Accounting*, Vol. 35, 2010, p. 164.

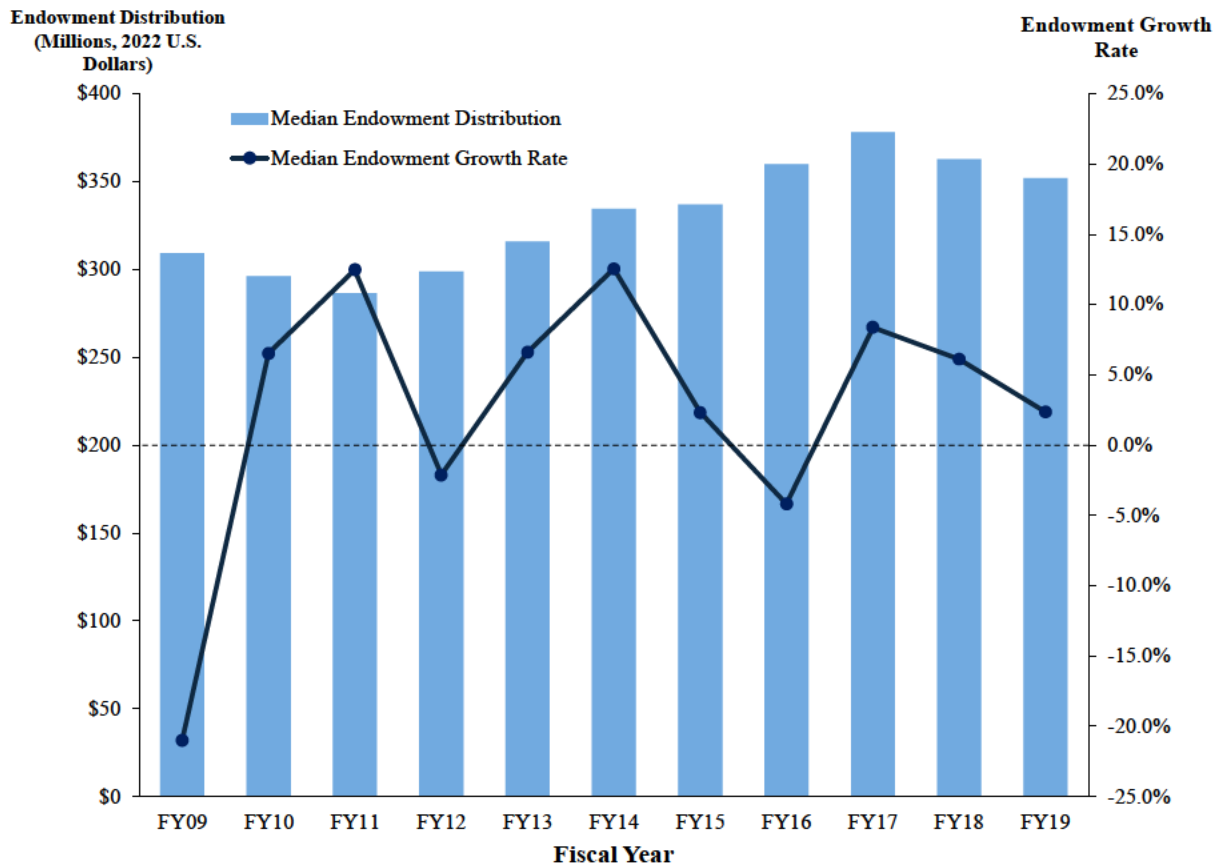
⁶⁶⁸ “HEPI Design and Use,” Commonfund, available at <https://info.commonfund.org/hubfs/Institute/HEPI/HEPI%20Design%20and%20Use.pdf>, accessed July 7, 2024; Gibson, Annetta, “Budgeting in Higher Education,” *School of Business Faculty Publications*, January 2009.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Analysis of Defendants' endowment distribution and total endowment net assets show that endowment distributions, after adjusting for inflation to real 2022 dollars, have increased steadily over time for Defendants despite volatile endowment growth, as shown in **Figure 13.**

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Figure 13
Defendant Endowment Distributions and Growth Rates
Fiscal Year 2009 to Fiscal Year 2019⁶⁶⁹

**Notes:**

[1] Endowment distributions are adjusted for inflation to 2022 dollars using the CPI. For fiscal years, I apply the inflation adjustment to the listed year. For example, nominal amounts in FY09 are treated as 2009 dollars.

[2] Endowment growth rates for each school are the year-over-year rates of change of the value of total endowment net assets at the end of each fiscal year.

[3] Data come from the “endowment distribution” and “total endowment net assets” tables in DARTMOUTH_0000164672 (“Endowment Distribution Rate,” Dartmouth College).

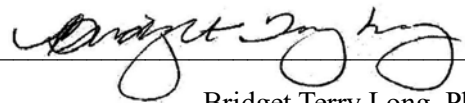
[4] All 17 Defendants are included for the entire period, regardless of their membership in the 568 Group.

318. As described throughout this section, short-run “excess returns” are not relied upon for planning purposes. During my time as an administrator, I did not make spending decisions

⁶⁶⁹ Backup materials to this report (Endowments); DARTMOUTH_0000164672 (“Endowment Distribution Rate,” Dartmouth College); “Consumer Price Index for All Urban Consumers: All Items in U.S. City Average,” Federal Reserve Bank of St. Louis, June 2024, available at <https://fred.stlouisfed.org/series/CPIAUCNS>, accessed August 7, 2024. Harvard similarly steadily increased its endowment distributions from 2007 through 2023 despite volatile endowment returns. “Harvard’s Endowment,” Harvard University, available at <https://finance.harvard.edu/endowment>, accessed December 11, 2023.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

based on an expectation of how the endowment might perform in an individual year, and in recent years, leadership has cautioned each school within Harvard to work under the assumption of muted returns and increased market volatility. As such, we were cautioned not to make major multi-year financial commitments without a strong, reliable revenue source in place. Spending decisions, therefore, are not made based on reactions to so-called “excess returns” in a particular year or even over a three-year period. To the contrary, responsible decision-making about spending, especially for new initiatives and commitments, must be made based on a view of how the existing endowment and conservative projections about returns might be used to best support current and future students, faculty, facilities, and existing programs in perpetuity.

A handwritten signature in black ink, appearing to read "Bridget Terry Long", is written over a horizontal line.

Bridget Terry Long, Ph.D.
August 7, 2024

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

APPENDIX A
CURRICULUM VITAE

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Bridget Terry Long, Ph.D.

Harvard Graduate School of Education
Gutman Library Room 467, 6 Appian Way, Cambridge, MA 02138
bridget_long@gse.harvard.edu ~ <http://www.bridgetterrylong.com>

ACADEMIC POSITIONS

Academic Appointments

Harvard University Distinguished Service Professor (2024 to present)

Saris Professor of Education and Economics (endowed chair), Harvard Graduate School of Education (2011 to present); formerly called the *Xander Chair of Education and Economics*.

Professor of Education and Economics, Harvard Graduate School of Education (2009-11)

Associate Professor of Education and Economics, Harvard Graduate School of Education (2004-09)

Assistant Professor, Harvard Graduate School of Education (2000-04)

Academic Leadership

Dean of the Faculty, Harvard Graduate School of Education (2018-24)

Led the school through the development and launch of the redesigned master's degree program, the COVID pandemic and pivot to remote education during AY20-21, and the introduction of its first online master's degree. Also substantially increased the availability of student financial aid with a successful fundraising campaign and expanded HGSE's external engagement with working educators, leaders, and school communities.

Academic Dean, Harvard Graduate School of Education (2013-17)

Oversaw Academic Affairs, including master's and doctoral programs, faculty reviews and searches, faculty governance, student disciplinary cases, and developed faculty and student resources.

Faculty Director, Ed.D./Ph.D. Degree Program, Harvard Graduate School of Education (2010-13)

Current Academic and Research Affiliations

Research Associate, National Bureau of Economic Research (NBER) (2009 to present); *Faculty Research Fellow* (2003-09)

Elected Member, American Academy of Arts and Sciences (2024 to present)

Elected Member, National Academy of Education (NAEd) (2019 to present)

Elected Fellow, International Academy of Education (2019 to present)

Affiliate, Abdul Latif Jameel Poverty Action Lab (J-PAL) (2020 to present)

Member, International Women's Forum of Massachusetts (2021 to present)

EDUCATION

Ph.D. Harvard University, Department of Economics (2000). Dissertation: *The Market for Higher Education: Economic Analyses of College Choice, Returns, and State Aid Policy*.
Committee members: Caroline Hoxby (chair); Lawrence Katz; Claudia Goldin.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- M.A. Harvard University, Department of Economics (1997). Fields: *Labor Economics, Public Finance, Urban Economics*.
- A.B. Princeton University (1995). Major: *Economics*. Certificate: *Afro-American Studies*.
- Courses Stanford University (Summer 1993). American Economic Association Graduate School Preparation Program.

CURRENT BOARDS AND ORGANIZATIONAL LEADERSHIP

- Board Chair*, MDRC (2022 to present). *Member* (2010 to present). *Member*, Education, Nomination, and Finance Committees (various years).
- Co-Chair*, Commission on Opportunities after High School, American Academy of Arts and Sciences (2024 to present)
- Board Member*, Axim Collaborative (previously called The Center for Reimagining Learning or tCRIL), a nonprofit led by Harvard and MIT focused on inclusive learning and education (2022 to present)
- Board Member*, Red Sox Foundation (2019 to present)
- Board Member*, Curriculum Associates (2022 to present)
- Trustee*, Buckingham Browne & Nichols (2016-22; 2023 to present), *Member*, Executive Committee (2018-22). *Chair*, Real Estate Committee (2017-22). *Member*, Head of School Search Committee (2017).
- Member*, Beth Israel Deaconess Medical Center Leadership Board (2023 to present)
- Selection Panel Member*, School on the Move Prize, EdVestors (2018 to present)

PREVIOUS BOARDS AND AFFILIATIONS

- Member*, Committee on the Future of Education Research at the Institute of Education Sciences in the U.S. Department of Education. National Academies of Sciences, Engineering, Medicine, Division of Behavioral and Social Sciences and Education. (2021-24)
- Co-Chairperson*, Massachusetts Business Coalition for Early Childhood Education (2020-24)
- Board Member*, The Character Lab (2021-24)
- Member*, Mindset Scholars Network, Center for Advanced Study in the Behavioral Sciences at Stanford University (2016-22)
- Chair* (2011-13), *Vice Chair* (2010-11), *Board Member* (2010-16). National Board of Education Sciences (NBES), Institute of Education Sciences (IES), U.S. Department of Education. Presidential Appointment with Senate confirmation.
- Board Member*, Public Education Nominating Council for Massachusetts. Appointed by Gov. Deval Patrick (2007-15)
- Board Member*, Society for Research on Educational Effectiveness (SREE) (2014-18)
- Affiliate*, Center for Analysis on Postsecondary Education and Employment (CAPSEE) (2011-16)
- Board Member*, Commonwealth Corporation (2008-2013)
- Affiliate*, National Center of Postsecondary Research (NCPR) (2006-12)

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Board Member, Soldiers Field Park Children Center. Chair of the Education Policies Committee (2010-12)

Trustee, Newbury College, Brookline, MA (2004-09). *Chair*, Academic and Enrollment Management Committee and *Member*, Executive Committee.

Visiting Scholar, Boston Federal Reserve Bank, New England Public Policy Center (2006-07)

Scholar, Young Faculty Leadership Forum, Harvard University (2002-06)

Associate, National Center for Public Policy and Higher Education (2002-03)

HONORS AND AWARDS

Elected to the *American Academy of Arts and Sciences* (2024)

Peter H. Rossi Award for Contributions to the Theory or Practice of Program Evaluation, *Association for Public Policy Analysis and Management* (APPAM) (2022)

Spencer Foundation Mentor Award (2021)

Get Connected!'s *50 Most Influential People of Color in Higher Education* (2020)

Elected to the *National Academy of Education* (NAEd) (2019)

Elected to the *International Academy of Education* (2019)

Fellow, Lumina Foundation for Education (2013-2015)

"Learners to Leaders" Award for Distinguished Alumni, Naperville North High School (2013)

Selected to give the *Henry and Bryna David Lecture*, National Academy of Sciences, Division of Behavioral and Social Sciences and Education. Awarded to a leading expert based on innovative research in the behavioral and social sciences. "The Affordability Problem: How Colleges and Government can work together." (2009)

Robert P. Huff Golden Quill Award. Given by the *National Association of Student Financial Aid Administrators* (NASFAA) for excellence in research and published works on student financial assistance (2008)

Featured by *The Chronicle of Higher Education* as one of eleven scholars in "New Voices: A Look at the New Generation of Higher-Education Thinkers." (2005)

National Academy of Education and Spencer Foundation Postdoctoral Fellowship. "The Role of Price in College Decisions: Implications for Aid Policy." (2002-04)

Selected as a "Rising Star" in the Academy by *Black Issues in Higher Education* (2003)

Morningstar Award for Excellence in Teaching, Harvard Graduate School of Education (2003)

American Educational Research Association (AERA) Dissertation Grant. "The Market for Higher Education: Economic Analyses of College Choice, Returns, and State Aid Policy." (1999-2000)

Harvard University, Department of Economics, Graduate Studies Fellowship (1995-2000)

Sumner Slichter Fellowship for Study in Labor Economics, Harvard University (1996-97)

National Science Foundation, Graduate Studies Fellowship (1995-98)

PEER-REVIEWED JOURNAL ARTICLES

Bettinger, Eric, Oded Gurantz, Monica Lee, and B. T. Long. (2022) "'Prior-Prior Year' FAFSA Increased

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Aid Submissions but Likely not Enrollment." *Research in Higher Education*.
- Avery, Christopher, Benjamin L. Castleman, Michael Hurwitz, Bridget T. Long, Lindsay C. Page. (2021) "Digital Messaging to Improve College Enrollment and Success." *Economics of Education Review* 84.
- Boatman, Angela and B. T. Long. (2018) "Does Remediation Work for All Students? How the Effects of Postsecondary Remedial and Developmental Courses Vary by Level of Academic Preparation." *Educational Evaluation and Policy Analysis* 40(1): 29-58.
- Castleman, Benjamin L., B. T. Long, and Zachary Mabel. (2018). "Can Financial Aid Help to Address the Growing Need for STEM Education? The Effects of Need-Based Grants on the Completion of Science, Technology, Engineering and Math Courses and Degrees." *Journal of Policy Analysis and Management* 37(1): 136-166.
- Bettinger, Eric and B. T. Long. (2018) "Mass Instruction or Higher Learning? The Impact of Class Size in Higher Education." *Education Finance and Policy* 13(1): 97-118. [equal authorship]
- Castleman, Benjamin and B.T. Long. (2016) "Looking Beyond Enrollment: The Causal Effect of Need-Based Grants on College Access, Persistence, and Graduation." *Journal of Labor Economics*, 34(4), 1023–1073.
- Boatman, Angela and B. T. Long. (2016) "Does Financial Aid Impact College Student Engagement? The Effects of the Gates Millennium Scholarship on Academic and Extracurricular Behaviors." *Research in Higher Education* 57(6), 653-681.
- Bettinger, Eric, B. T. Long, and Eric Taylor. (2016) "When Inputs are Outputs: The Case of Graduate Student Instructors? The Impact of Teaching Fellows on Student Outcomes." *Economics of Education Review* 52: 63-76. [equal authorship]
- Bettinger, Eric, B. T. Long, Philip Oreopoulos, and Lisa Sanbonmatsu. (2012) "The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment." *Quarterly Journal of Economics* 127(3): 1-38. [equal lead authorship with Bettinger and Oreopoulos]
- Bettinger, Eric and B. T. Long. (2010) "Does Cheaper Mean Better? The Impact of using Adjunct Instructors on Student Outcomes." *Review of Economics and Statistics* 92(3): 598–613. [equal authorship]
- Bound, John, Brad Hershbein, and B. T. Long. (2009) "Student reactions to Increasing College Competition." *Journal of Economic Perspectives*, 23(4): 119–46. A longer version is available as NBER Working Paper No. 15272. [equal authorship]
- Bettinger, Eric and B. T. Long. (2009) "Addressing the Needs of Under-Prepared College Students: Does College Remediation Work?" *Journal of Human Resources* 44(3): 736–771. [equal authorship]
- Long, B. T. and Michal Kurlaender. (2009) "Do Community Colleges provide a Viable Pathway to a Baccalaureate Degree?" *Educational Evaluation and Policy Analysis* 31(1): 30-53. [lead author]
- Osili, Una Okonkwo and Long, B. T. (2008) "Does Female Schooling Reduce Fertility? Evidence from Nigeria." *Journal of Development Economics*, vol. 87, no. 1, pp. 57-75.
- Long, B. T. (2007) "The Contributions of Economics to the Study of College Access and Success." *Teachers College Record*, vol. 109, no. 10.
- Long, B. T. and Erin K. Riley. (2007) "Financial Aid: A Broken Bridge to College Access?" *Harvard*

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Educational Review, vol. 77, no. 1, Spring.

Bettinger, Eric and B. T. Long. (2005) "Do Faculty Members serve as Role Models? The Impact of Faculty Gender on Female Students." *American Economic Review*, vol. 95, no. 2. [equal authorship]

Bettinger, Eric and B. T. Long. (2005) "Remediation at the Community College: Student Participation and Outcomes." *New Directions for Community Colleges*. [equal authorship]

Long, B. T. (2004) "Does the Format of an Aid Program Matter? The Effect of In-Kind Tuition Subsidies." *Review of Economics and Statistics*, vol. 86, no. 3, pp. 767-782.

Long, B. T. (2004) "How do Financial Aid Policies affect Colleges? The Institutional Impact of the Georgia HOPE Scholarship." *Journal of Human Resources*, vol. 39, no. 3.

Long, B. T. (2004) "How Have College Decisions Changed Overtime? An Application of the Conditional Logistic Choice Model." *Journal of Econometrics*, vol. 121, no. 1-2: pp. 271-296.

OTHER SCHOLARLY PUBLICATIONS

Long, B. T. (2022) "Increasing the Impact of Program Evaluation: The Importance of Challenging Assumptions and Incorporating New Perspectives." Prepared remarks for the Peter H. Rossi Award for Contributions to the Theory or Practice of Program Evaluation. *Evaluation Review*.

Long, B. T. (2019) "Supporting College Student Access and Success: Making Sure Hard Work Pays Off." AERA Centennial Lecture.

Long, B. T. (2018) "The College Completion Landscape: Trends, Challenges, and Why it Matters." *Elevating College Completion*. Washington, DC: American Enterprise Institute and the Third Way.

Long, B. T. (2015) "The Financial Crisis and College Enrollment: How have Students and Their Families Responded?" *How the Financial Crisis and Great Recession Affected Higher Education*. Jeffrey Brown and Caroline Hoxby, Eds. University of Chicago Press.

Long, B. T. (2014) "Addressing the Academic Barriers to Higher Education." *Policies to address Poverty in America*. Melissa S. Kearney and Benjamin H. Harris, Eds. Washington, DC: Brookings Institution, The Hamilton Project.

Long, B. T. (2013) "Supporting Access to Higher Education." *Legacies of the War on Poverty*. Martha Bailey and Sheldon Danziger, Eds. The National Poverty Center Series on Poverty and Public Policy. New York: Russell Sage Foundation.

Bettinger, Eric, Angela Boatman, and B. T. Long. (2013) "Student Supports: Developmental Education and Other Academic Programs." Cecilia Rouse, Lisa Barrow, and Thomas Brock, Eds. *Future of Children: Postsecondary Education in the U.S.*, vol. 23, no. 1, Spring. [equal authorship]

Long, B. T. and Angela Boatman. (2013) "The Role of Remediation and Developmental Courses in Access and Persistence." Anthony Jones and Laura Perna, Eds. *The State of College Access and Completion: Improving College Success for Students from Underrepresented Groups*. New York: Routledge Books.

Long, B. T. (2012) "Remediation: The Challenge of Helping Underprepared Students." In Andrew P. Kelly and Mark Schneider, Eds. *Getting to Graduation: The Completion Agenda in Higher Education*. Baltimore: The Johns Hopkins University Press.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Long, B. T. (2011) "The New Financial Aid Policies: Their Impact on Access and Equity for Low-Income Students." Lisa M. Stulberg and Sharon Lawner Weinberg, Eds. *Diversity in American Higher Education: Toward a More Comprehensive Approach*. New York: Routledge Books.
- Long, B. T. (2010) "Higher Education Finance and Accountability." In Kevin Carey and Mark Schneider, Eds. *Accountability in American Higher Education*. New York: Palgrave Macmillan and American Enterprise Institute.
- Long, B. T. and Stella M. Flores. (2010) "Policy, Finance and Economics." In Shaun Harper and Sylvia Hurtado, Eds. *Racial and Ethnic Diversity in Higher Education*. Association for the Study of Higher Education (ASHE) Reader Series. Pearson Publishing
- Long, B. T. (2010) "High School Dropout Prevention and College Preparatory Programs." In Phillip B. Levine and David J. Zimmerman, Eds. *Targeting Investments in Children: Fighting Poverty When Resources are Limited*. University of Chicago Press, Robin Hood Foundation, and the National Bureau of Economic Research.
- Long, B. T. (2010) "Making College Affordable by Improving Aid Policy." *Issues in Science and Technology*. Washington, D.C.: National Academy of Sciences, Division of Behavioral and Social Sciences and Education, Summer.
- Long, B. T. (2010) "Beyond Admissions: Reflections and Future Considerations." In Mark Long and Marta Tienda, Eds. *Beyond Admissions: Re-thinking College Opportunities and Outcomes*. The ANNALS of the American Academy of Political and Social Science, vol. 627, January.
- Calcagno, Juan Carlos and B. T. Long. (2009) "Evaluating the Impact of Remedial Education in Florida Community Colleges: A Quasi-Experimental Regression Discontinuity Design." National Center for Postsecondary Research (NCPR) Brief, August.
- Long, B. T. (2009) "Financial Aid and Older Workers: Supporting the Nontraditional Student." *Strategies for the Improving Economic Mobility of Workers*. Kalamazoo: W.E. Upjohn Institute for Employment Research and the Federal Reserve Bank of Chicago.
- Bettinger, Eric and B. T. Long. (2007) "Institutional Responses to Reduce Inequalities in College Outcomes: Remedial and Developmental Courses in Higher Education." In Stacy Dickert-Conlin and Ross Rubenstein, Eds. *Economic Inequality and Higher Education: Access, Persistence, and Success*. New York: Russell Sage Foundation. [equal authorship]
- Long, B. T. and Erin K. Riley. (2007) "Sending Signals to Students: The Role of Early Placement Testing in Improving Academic Preparation." In *Minding the Gap: Why Integrating High School with College Makes Sense and How to Do It*. Cambridge: Harvard Education Press and Jobs for the Future. [lead author]
- Long, B. T. and Erin K. Riley. (2007) "The Demand Side of Loans: The Changing Face of Borrowers." In Frederick Hess, Ed. *Footing the Tuition Bill: The New Student Loan Sector*. Washington, D.C.: American Enterprise Institute. [lead author]
- Long, B. T. (2007) *Using Research to Improve Student Success: What more could be done?* Washington, D.C.: National Postsecondary Education Cooperative (NPEC), National Symposium on Postsecondary Student Success.
- Bettinger, Eric and B. T. Long. (2006) "The Increasing Use of Adjunct Instructors at Public Institutions: Are we Hurting Students?" In Ronald Ehrenberg, Ed. *What's Happening to Public Higher Education*. Westport, CT: Greenwood Press for the American Council on Education. [equal

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

authorship]

Long, B. T. (2004) "The Impact of Federal Tax Credits for Higher Education Expenses." In Caroline M. Hoxby, Ed. *College Choices: The Economics of Which College, When College, and How to Pay For It*. Chicago: University of Chicago Press and the National Bureau of Economic Research.

Long, B. T. (2003) "The Connection between Government Aid and College Pricing." *Journal of Student Financial Aid*, vol. 33, no. 2.

Long, B. T. (2003) "Diversity by Any Other Name: Are there Viable Alternatives to Affirmative Action in Higher Education?" *The Western Journal of Black Studies*, vol. 27, no.1, pp. 20-30.

Long, B. T. (2002) "Do State Financial Aid Programs Cause Colleges to Raise Prices?" *Who Should We Help?* Donald Heller and Patricia Marin, eds. Cambridge: Harvard Civil Rights Project.

POLICY AND OTHER REPORTS

Task Force Member. (Forthcoming Aug 2024) *Higher Education Climate Action Plan*. The Aspen Institute.

Panel Member. (2024) *Practice Guide on College Access and Readiness*. What Works Clearinghouse (WWC), U.S. Department of Education.

Perna, L. W., Gonzalez, M., Hines, E. M., Holcomb-McCoy, C., Lombardi, A., Long, B., Rodriguez, A., Winkler, D. Brockman, S., Bruch, J., Espinoza, A., Haymond, K., A., Person, A., Pham, C., Steele, E., Wissel, S., Wood, M. (2024). *Improving college access and readiness for all students: A practice guide for educators* (WWC 2022003). Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education.

Harvard Future of Teaching and Learning Task Force. (2022) *Reimagining the Classroom, Enriching Content, and Expanding the Harvard Community*.

Long, B. T. (2017) *Helping Women to Succeed in Higher Education: Supporting the Non-Traditional College Student with Child Care*. Washington, D.C.: The Brookings Institution and the Hamilton Project.

Long, B. T. and Monnica Chan. (2017) *Massachusetts State Student Aid Program Study*. Prepared for the Massachusetts Board of Higher Education.

Long, B. T. (2016) *State Support for Higher Education: How Changing the Distribution of Funds Could Improve College Completion Rates*. National Commission on Financing 21st Century Higher Education. University of Virginia, Miller Center.

Baum, Sandy, Thomas Bailey, Eric Bettinger, Susan Dynarski, Arthur Hauptman, Harry Holzer, James Jacobs, Kathleen Little, Bridget Terry Long, Michael McPherson, James Rosenbaum, Donald Saleh, Judith Scott-Clayton, Sarah Turner. (2013) *Rethinking Pell Grants*. College Board Advocacy & Policy Center, report of the Rethinking Pell Grants Study Group.

Long, B. T. and Laura Kavazanjian. (2012) *Affirmative Action in Tertiary Education: A Meta-Analysis of Global Policies and Practices*. Report prepared for The World Bank.

Long, B. T. and Zack Mabel. (2012) "Barriers to College Success: Income Disparities in Progress to Completion."

Baum, Sandra, Susan Dynarski, Art Hauptman, B. T. Long, Michael McPherson, Judith Scott-Clayton, and Sarah Turner. (2011) *Suggestions for Pell Grant Reform*. Washington, DC. College Board.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Long, B. T. (2010) *Grading Higher Education: Giving Consumers the Information They Need*. Washington, D.C.: The Center for American Progress and The Hamilton Project, December.
- Long, B. T. (2010) "The Supply Side of Higher Education: Higher Education Finance and the Potential of Using Institutional Incentives to Support Student Success." Prepared for the project on Reform and Innovation in the New Ecology of U.S. Higher Education, Stanford University. Principal Investigators: Mitchell Stevens and Michael Kirst.
- Long, B. T. (2010) "Financial Aid: A Key to Community College Student Success." Issue Brief prepared for the White House Summit on Community Colleges, October 5th.
- Long, B. T. and Anjali Adukia. (2009) *The Impact of the Financial Crisis on Tertiary Education World Wide*. Report prepared for The World Bank.
- Bettinger, Eric and B. T. Long. (2009) *Strategies for the Redesign of the Beginning Postsecondary Students Longitudinal Study*. Submitted to the National Center for Education Statistics (NCES).
- Long, B. T. (2009) *Emerging Issues in Postsecondary Access and Choice: Implications for the Conceptualization and Modeling of College Decisions*. Washington, D.C.: National Center for Education Statistics (NCES)/National Institute of Statistical Sciences (NISS) Access and Choice Project.
- Baum, Sandy, Michael McPherson, Thomas Bailey, Steven Brooks, Charles Clotfelter, Susan Dynarski, Ronald Ehrenberg, Carl Kaestle, Tom Kane, Bridget Terry Long, Marshall Smith, William Truett, and Jane Wellman. (2008) *Fulfilling the Commitment: Recommendations for Reforming Federal Student Aid*. Report from the Rethinking Student Aid Study Group. Spencer Foundation, Lumina Foundation, and the College Board.
- Boatman, Angela and B. T. Long. (2008) *Does Financial Aid Impact Collegiate Success? The Effects of the Gates Millennium Scholars Program on Academic Performance and Behaviors*. Report for the Bill & Melinda Gates Foundation and The Institute of Higher Education Policy.
- Bert, Melissa, B. T. Long, and Angela Boatman. (2008) *Does Financial Aid affect the Likelihood of Minority Students Entering a STEM Discipline? The Effects of the Gates Millennium Scholars Program*. Report for the Bill & Melinda Gates Foundation and The Institute of Higher Education Policy.
- Calcagno, Juan Carlos and B. T. Long. (2008) "The Impact of Postsecondary Remediation Using a Regression Discontinuity Approach: Addressing Endogenous Sorting and Noncompliance." National Center for Postsecondary Research (NCPR) Working Paper. (Also National Bureau of Economic Research (NBER) Working Paper No. 14194.)
- Long, B. T. (2008) "What Is Known About the Impact of Financial Aid? Implications for Policy." National Center for Postsecondary Research (NCPR) Working Paper.
- Long, B. T. (2007) *College Remedial and Developmental Courses: Serving the Needs of Under-Prepared Students*. Information Brief for Program Officers. Seattle: Bill & Melinda Gates Foundation, November.
- Long, B. T., Clantha McCurdy, and Jamie Merisotis. (2006) *Final Report from the Task Force on Student Financial Aid*. Massachusetts Board of Higher Education. [lead author]
- Long, B. T. with Dana Ansel and Greg Leiserson. (2006) *Paying for College: The Rising Cost of Higher Education*. Boston, MA: MassINC. [lead author]
- Long, B. T. (2006) *Postsecondary Remediation: Major Questions and Research*. Report for the Bill and Melinda Gates Foundation.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Long, B. T. (2006) *Estimates of the Returns from Increased Educational Attainment*. Dallas, TX: Best Associates.
- Long, B. T. (2005) *State Financial Aid: Policies to Enhance Articulation and Transfer*. Boulder, CO: Western Interstate Commission on Higher Education, Changing Direction Project.
- Reville, S. Paul, Celine Coggins, Jennifer Candon, Kathryn McDermott, Andrew Churchill, and B. T. Long. (2005) *Reaching Capacity: A Blueprint for the State Role in Improving Low Performing Schools and Districts*. Boston, MA: Rennie Center for Education Research & Policy at MassINC.
- Choitz, Victoria, Laura Dowd, and B. T. Long. (2004) *Getting Serious About Lifelong Learning: Improving the Use and Value of the Hope and Lifetime Learning Tax Credits for Working Adults Students*. Arlington, MA: FutureWorks. [equal authorship]
- Long, B. T. (2004) "The Role of Perceptions and Information in College Access: An Exploratory Review of the Literature and Possible Data Sources." Boston: The Education Resources Institute (TERI).
- Longanecker, David, Cheryl D. Blanco, and B. T. Long. (2004) "The Impact of Federal Financial Aid Policies on the Funding, Design, Operation, and Marketing of State and Institutional Financial Aid Policies and Practices: A Review of the Literature." Boston: The Education Resources Institute (TERI).

OTHER WORKING PAPERS

- Soliz, Adela and B. T. Long. (2021) "Does Working Help or Hurt College Students? The Effects of Federal Work-Study Participation on Student Outcomes." *Under submission*.
- Bettinger, Eric, B. T. Long, Monica Lee. (2020). "Connecting Students with Financial Aid: The Impact of Information and Framing on Aid Renewal and Enrollment Intensity."
- Long, B. T. and Eric Bettinger. "Simplification and Incentives: A Randomized Experiment to Increase College Savings." Project known as the Early College Planning Initiative (ECPI).
- Taking Stock of the Research: Understanding the Power and Limitations of Nudges in Higher Education (with Eric Bettinger)
- Soliz, Adela and B. T. Long. (2014) "The Causal Effect of Federal Work Study on Student Outcomes in the Ohio Public University System." *Center for Analysis of Postsecondary Education and Employment (CAPSEE) Working Paper*.
- Daugherty, Lindsay and B. T. Long. (2013) "Does more information and a brief refresher course make a difference in placement into remediation? Evaluating a Developmental Education Intervention." Unpublished paper.
- Owen, Laura, Eric P. Bettinger, B. T. Long, and Philip Oreopoulos. (2012). "How Late is Too Late? The Influence of Summer Outreach on FAFSA Completion and College Enrollment for the Uncommitted High School Graduate." Unpublished paper.
- Long, B. T. and Juan Carlos Calcagno. (2011) "Does Remediation Help All Students? The Heterogeneous Effects of Postsecondary Developmental Courses." Unpublished paper.
- Long, B. T. (2010) "The Role of States and Institutions in the Provision of Postsecondary Remediation: Policy Choices and Debates." Unpublished paper.
- Long, B. T. (2007) "Do Loans Increase College Access and Choice? Examining the Introduction of Universal Student Loans." Federal Reserve Bank of Boston, New England Public Policy Center,

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Working Paper No. 07-1, November.

Hoxby, Caroline M. and B. T. Long. (1999) "Explaining Rising Income and Wage Inequality among the College-Educated." National Bureau of Economic Research (NBER) Working Paper No. 6873.

EXPERT TESTIMONY AND BRIEFINGS

Expert Testimony for the Court

Expert, Rebuttal, and Response Reports (2018) and Court Testimony (2020). United States District Court for the Middle District Of North Carolina Case No. 1:14-CV-954. *Students for Fair Admissions, Inc. v. The University Of North Carolina at Chapel Hill, et al.*

Federal Congressional Testimony

Prepared Testimony, U.S. Senate, Committee on Health, Education, Labor and Pensions. Full Committee Hearing: *Time to Finish Fixing the FAFSA*. (2020)

Prepared Testimony, U.S. Senate, Committee on Health, Education, Labor and Pensions. Full Committee Hearing: *Ensuring Access to Higher Education: Simplifying Federal Student Aid for Today's College Student*. (2013)

Prepared Testimony, U.S. House of Representatives, Committee on Education and the Workforce. Hearing: *Education Research: Exploring Opportunities to Strengthen the Institute of Education Sciences*. (2013)

"College Tuition Pricing and Federal Financial Aid: Is there a Connection?" U.S. Senate, Committee on Finance. Hearing: *Report Card on Tax Exemptions and Incentives for Higher Education: Pass, Fail, or Need Improvement?* (2006)

Other Federal Testimony

Prepared Comments on the impact of COVID-19 on education. U.S. Senate Democratic Steering and Outreach Committee. (2020)

Prepared Comments, White House Convening on Community College Research. Co-sponsored by the Domestic Policy Council, Council of Economic Advisers, and the U.S. Department of Education (2016)

"The State of Community College Research." White House Education Scholars Convening on Community College Research. (2016)

Prepared Comments, Middle Class Prosperity Project Forum. Hearing sponsored by Sen. Elizabeth Warren and Rep. Elijah Cummings. University of Massachusetts-Boston (2015)

Congressional Research Briefing. "Using Information and Assistance to Improve College Outcomes." Sponsored by the Institute for Policy Research, Northwestern University (2014)

Prepared Comments, White House Summit on College Opportunity. Co-sponsored by the National Economic Council, Domestic Policy Council, and U.S. Department of Education. Remarks given by Pres. Obama. (2014)

Prepared Comments, Capitol Hill Briefing sponsored by Education Deans Alliance, American Educational Research Association, and the National Academy of Education: "Payoffs of Long-Term Investments in Education Research" (2011)

State Government Testimony

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

"Redesigning Massachusetts State Financial Aid: Simplifying Process and Maximizing Impact." Presentation to the Massachusetts Board of Higher Education (2018)

"Financial Aid Policy: Best Practices from Around the Nation." Massachusetts Special Commission on Education Scholarships (2012)

"Does the current financial aid system promote access to higher education? Analysis of the Massachusetts Financial Aid and Enrollment Databases." Massachusetts Board of Higher Education (2006)

"The Challenges of Access to Higher Education: The Case of Massachusetts." Massachusetts Board of Higher Education, Task Force on Financial Aid (2004)

"State Merit-Based Aid Programs." West Virginia State Legislature, Education Committee (2001)

Other Government Briefings and Memos

Congressional Staff Briefing, "Elevating College Completion." Organized by AEI and Third Way. (2018)

Policy Briefing with U.S. Senator Elizabeth Warren. (2014)

Policy Briefing for the Office Staff of the First Lady. "Financial Aid, Information, and Assistance." (2014)

Policy Briefing with U.S. Secretary of Education Arne Duncan, Harvard University (2014)

Policy Memo to Chairman Tom Harkin and Senator Lamar Alexander, U.S. Senate, Committee on Health, Education, Labor and Pensions. "Consensus Recommendations for your Consideration." With Kristin D. Conklin, Kimberly Cook, and Judith Scott-Clayton. (2013)

Prepared Comments, Briefing on the Federal College Rating System Proposal for Secretary of Education Arne Duncan, U.S. Department of Education (2013)

Panel Member, Government Accountability Office Review of Simplifying the Federal Student Aid Application Process (2009)

"The Support of Public Higher Education in Massachusetts: How do we Compare?" Prepared for Commissioner Richard Freeland, Massachusetts Department of Higher Education (2009)

"Reforming Federal Financial Aid." Education Briefing for Senator Edward Kennedy. (2006)

EDITORIALS & COMMENTARY

Long, B.T. (March 17, 2021) "How to Ensure This Isn't a Lost Year for America's Kids." *The Washington Post*.

Interview with Liz Mineo. (March 9, 2021) "Post-Pandemic Challenges for Schools." *Harvard Gazette*.

Interview with Goldie Blumenstyk. (February 17, 2021). "What's Different About This Recession and Why That Matters to Higher Ed." *The Chronicle of Higher Education, The Edge Newsletter*.

Long, B. T. (Oct 19, 2020) "Why I Vote." *Medium*.

Interview with Jill Anderson. (Oct 16, 2020) "Education in Uncertain Times." *EdCast* podcast series.

Long, B. T. (Sep 29, 2020) "Dear Students: We are strong as a community, even when distant." *Medium*.

Vegas, Emiliana and B. T. Long. (Apr 9, 2020) "What can COVID-19 teach us about strengthening education systems?" Brookings Institution blog.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Cook, Kim, Kristin Hultquist, Bridget Terry Long, and Judith Scott-Clayton. (Dec 5, 2019) "FAFSA: Ask any college student. The federal student aid application is needlessly complex." *USA Today*.
- Hess, Rick and B. T. Long. (Jun 27, 2018) "Straight Up Conversation: New Harvard Ed School Dean Bridget Terry Long." Education Week blog.
- Long, B. T. and Kristin Conklin. (2015) "Fixing the On-Ramp to Higher Education." *Roll Call*.
- Long, B. T. (2014) "Is College Worth It? Yes, But Not Always." *Examining the Value of a College Degree*. Seattle: Payscale.
- Long, B. T. (2009) "Breaking the Affordability Barrier: How much of the college access problem is attributable to lack of information about financial aid?" *National CrossTalk*. San Jose, CA: The National Center for Public Policy and Higher Education, December.
- Long, B. T. and Dana Ansel (2007) "As Student Debt Increases, Colleges Owe more in Performance." *Connection: The Journal of the New England Board of Higher Education*, Winter, vol. XXI: pp. 23-24. [lead author]
- Long, B. T. (2006) "What can Governments do to Improve Access and Success in Higher Education?" *National CrossTalk: Reactions to the Spellings Commission Report*. San Jose, CA: The National Center for Public Policy and Higher Education.
- Long, B. T. (2005) "The Remediation Debate: Are We Serving the Needs of Under-Prepared College Students?" *National CrossTalk*. San Jose, CA: The National Center for Public Policy and Higher Education.
- Long, B. T. (2003) "Who Can Afford College? The Economics behind Access." *Ed. Magazine*. Cambridge: Harvard Graduate School of Education.

DICTIONARY ENTRIES, BOOK FORWARDS, AND REVIEWS

- Long, B. T. (2021) Forward to *Re-Inventing American Higher Education for a New World Order*. By Paul LeBlanc. Harvard Education Press.
- Long, B. T. (2020) "Access to Higher Education: Barriers to Enrollment and Choice." *Encyclopedia of International Higher Education Systems and Institutions*. Jung Cheol Shin and Pedro Teixeira, Eds. Section: "Mass and Elite Higher Education in 21st Century." Springer Netherlands.
- Long, B. T. (2020) "Access to Higher Education: Affirmative Action." *Encyclopedia of International Higher Education Systems and Institutions*. Jung Cheol Shin and Pedro Teixeira, Eds. Section: "Mass and Elite Higher Education in 21st Century." Springer Netherlands.
- Long, B. T. (2018) "College Access." *New Palgrave Dictionary of Economics*. Ed., Bruce Weinberg.
- Long, B. T. (2012) "Financial Aid and Access to Higher Education." *Encyclopedia of Diversity in Education*. James A. Banks, Ed. Los Angeles: Sage Publications.
- Long, B. T. (2002) Book Review: *American Education & Corporations: The Free Market Goes To School*. By D. Boyles. *Teachers College Record*, vol. 104, no. 5.

GRANTS AND FUNDED PROJECTS

- PI, Institute of Education Sciences (IES), U.S. Department of Education (Grant# R305A160388): "Could Connecting Students with Financial Aid lead to Better College Outcomes? A Proposal to Test

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- the Effectiveness of FAFSA Interventions Using the NPSAS Sample." (2016-2023) Joint with Eric Bettinger. \$2,350,482.
- Co-PI, Bill and Melinda Gates Foundation, Grant: "Capacity Assistance: Leadership, Institutional Research/Data and Strategic Finance." (2018) Joint with Matt Miller and Jim Honan. \$1,094,360.
- Co-PI, Institute of Education Sciences (IES), U.S. Department of Education: "Digital Messaging To Improve College Enrollment and Success." (2014-2018) Joint with Chris Avery, Ben Castleman, and Lindsay Page. \$3,499,999.
- Co-PI, Institute of Education Sciences (IES), U.S. Department of Education (Grant# R305A120280): "Improving Information and Access to Financial Aid." (2012-17) Joint with Eric Bettinger. \$2,869,281.
- PI, Institute of Education Sciences (IES), U.S. Department of Education (Grant# R305A090204): "Simplification and Incentives: A Randomized Experiment to Increase College Savings." (2009-16) Joint with Eric Bettinger. \$1,757,738.
- Co-PI, Bill and Melinda Gates Foundation, Grant: "Improving Information and Access to Financial Aid: Expanding the FAFSA Experiment." (2009-13) Joint with Eric Bettinger and Philip Oreopoulos. \$1,400,088.
- PI, The Bill and Melinda Gates Foundation, Grant: "Understanding Barriers and Examining Interventions: A Project to Study Postsecondary Access and Success Using State Administrative Data." (2008-15) Joint with Eric Bettinger, Stella Flores, and Michal Kurlaender. \$1,961,931.
- Co-PI, TG Public Benefit Grant Program. "A Quantitative and Qualitative Examination of the Impact of Family Engagement on Students' Academic Outcomes." (2012-2015) Joint with Families United in Educational Leadership (FUEL). \$135,000.
- PI, Susan Thompson Buffett Foundation. Process evaluation of the Thompson Scholars Learning Community Program at the University of Nebraska campuses. Planning Grant (2012) \$50,000. Full Grant (2012-14) \$795,000.
- Project Member, Center for Analysis of Postsecondary Education and Employment (CAPSEE). Funded by the Institute of Education Sciences (IES), U.S. Department of Education (Grant# R305C110011). Housed at the Community College Research Center, Teachers College, Columbia University with participation by scholars at the University of Michigan, Stanford University, the City University of New York (CUNY), and the University of North Carolina. (2011-2016). \$9,951,362.
- Project Member, National Center of Postsecondary Research (NCPR). Funded by the Institute of Education Sciences (IES), U.S. Department of Education (Grant# R305A060010). Housed at the Community College Research Center, Teachers College, Columbia University with participation by MDRC and the University of Virginia. (2006-2012). \$9,813,619.
- Co-PI, "Increasing College Enrollment among Low- and Moderate-Income Families: A Program to Improve Access to College Information and Financial Aid." Joint with Eric Bettinger and Philip Oreopoulos. *Multiple funders:*
- The Bill and Melinda Gates Foundation (2008-10) \$1,245,024
 - Institute of Education Sciences (IES), U.S. Department of Education (Grant# R305A060010), National Center for Postsecondary Research (2007-09) \$100,000

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- National Science Foundation, Award# 0721158 (2007-12) \$455,509
- The Bill and Melinda Gates Foundation (2007) \$123,992
- Kauffman Foundation (2007-08) \$140,000
- The Spencer Foundation (2009-10) \$40,000

PI, Atlantic Philanthropies and Ford Foundation, Grant: "Building Infrastructure and Expanding Research in the Economics of Higher Education." With Thomas J. Kane (2006-08) \$998,000

PI, Smith Richardson Foundation, Domestic Public Policy Fellowship: "Under-prepared Students in Higher Education: Searching for the right Policies to address the Problem of Insufficient Preparation" (2006-07) \$60,000

Co-PI, Lumina Foundation for Education Grant: "The Role and Effect of Remediation in Higher Education." (2003-06) Joint with Eric Bettinger. \$225,000

PI, William F. Milton Fund, Harvard University, Research Grant: "The Role and Effect of Remedial Education in Higher Education." (2003-04) \$35,000

PI, Spencer Foundation Grant: "Community College Attendance as a Pathway to a Baccalaureate Degree." (2002-03) \$35,000

PI, Spencer Foundation Grant: "An Analysis of the Development and Impact of Honors Colleges at American Universities." (2001-02) \$35,000

PI, National Association of Student Financial Aid Administrators (NASFAA) Grant: "The Institutional Impact of the Georgia HOPE Program." (2001-02) \$5,000

INVITED KEYNOTE LECTURES

Peter H. Rossi Lecture, APPAM Research Conference. "Increasing the Impact of Program Evaluation: The Importance of Challenging Assumptions and Incorporating New Perspectives." (2022)

Keynote Speaker, Harvard Alumni Association, Saturday of Symposia, "Advancing Educational Opportunity to Fight Inequality." (2021)

Keynote Speaker, WPI 2021 HBCU Forum. "Re-Examining Economic Models: Considerations for HBCU Boards and Presidents." (2021)

Keynote Speaker, Imagine Solutions Forum. "COVID and Education: Challenges, Opportunities, and the Future of Learning." (2021)

Selected to give the *Grossman Lecture in Economics*, Colby College. (2022)

Selected to give the *Cornelson Distinguished Lecture*, Davidson College. (2022)

Centennial Lecture, American Education Research Association (AERA). "Supporting College Student Access and Success: Making Sure Hard Work Pays Off." Dorothy Chandler Pavilion, Los Angeles, CA. (2017).

Selected to give the *Calderwood Lecture in Economics*, Wellesley College. "The Economics of Higher Education Access and Success." Wellesley, MA (2017)

Keynote Speaker, Centre for Vocational Education Research (CVER) Annual Conference. London School of Economics. "Addressing Challenges to Educational Opportunity: Lessons from the U.S." London, England. (2017)

Featured Speaker, Summer Council of Presidents, American Association of State Colleges and Universities. "Addressing the Challenges Facing Today's Student: Promising Practices to

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Support College Access and Success." Boston, MA. (2017)
- Featured Speaker, 2017 Educator Summit: Character in 3D. "Supporting Student Success: Small things that make a BIG difference." Philadelphia, PA. (2017)
- Invited Lecture, *Curry Research Lectureship Series*, University of Virginia. "How much of a nudge is necessary? Using Information, Assistance, and Incentives to Increase College Savings and Enrollment" (2013)
- Invited Lecture, *CUNY Annual Policy Lecture*. "How has the Great Recession Changed American Higher Education?" (2013)
- Distinguished Lecture, *Monan Symposium*, Boston College. "Student Access and Affordability: Trends in Higher Education Policy." Symposium Theme: Cost, Access, and Equity in Higher Education: American and International Perspectives. Co-Sponsored by the Fulbright New Century Scholars Program. (2007)

MAJOR MEDIA ENGAGEMENTS (*selected*)

- Featured Panelist, Washington Post Live: Education in America. "Education 360: Defining the Debates." (2018)
- Featured Panelist, NBC Education Nation, Special Live Town Hall broadcast nationally (hosted by Rehema Ellis). "To & Through: Beyond High School." John F. Kennedy Library and Museum, Boston, MA. (2017)
- Featured Speaker, IDEAS Boston. "Nudging Students into College: Could a small change make a big difference?" (2011)
- Guest Commentator, National Public Radio. "Continuing Education No Simple Matter for Some." *News and Notes*, September 18, 2006.

OTHER SPEAKING EVENTS (*selected*)

- Speaker, American Academy of Arts and Sciences, 2024 Higher Education Forum at Aspen. (2024)
- Discussant, NBER Conference on Financing Higher Education, "*Examining the Effects of Tuition Reset Policies on Enrollment and Institutional Finances at Minority Serving Institutions.*" (2024)
- Speaker, Aspen Economic Strategy Group Annual Meeting, Session: Investing in America's Youth and Future Workforce. (2023)
- Speaker and Moderator, "Gen AI & Education: Inclusive Innovation for Student Success." Featuring Sal Khan (Khan Academy) and Cynthia Breazeal (MIT). Axim Collaborative Convening. (2023)
- Speaker, President's Commission on White House Fellow Domestic Policy Trip. (2021)
- Panelist, National Academy of Education Plenary, Meeting the Demand for Equitable Education in the Future: Honoring Edmund Gordon on His 100th Year, "What Equality of Educational Opportunity Means Today." (2021)
- Panelist, Education Writers Association, Higher Education Seminar. "Online Higher Education: The Promise and the Realities." (2020)
- Panelist, Institute of Education Sciences, Principal Investigator Meeting, Plenary Session: "Tackling Education Equity Together: How can Institutions of Higher Education and Education Research Funders Collaborate More Effectively?" (2020)
- Speaker, Sadie Collective: "Restore, Revive, Reclaim." (2020)

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Presentation and discussion with Governor Bill Haslam. "Promising Practices to Address: Challenges to Student Success." Tennessee Higher Education Summit. Nashville, TN. (2017)

Presenter, Behavioral Science & Policy Association Annual Conference, "Addressing Challenges to Educational Opportunity with Behavioral Science." (2017)

Presenter, Boulder Summer Conference on Consumer Financial Decision Making, "Simplification, Assistance, and Incentives: A Randomized Experiment to Increase College Savings." (2017)

Presenter, Association for Public Policy Analysis and Management (APPAM), International Conference. "Educational Inequalities" Plenary. London School of Economics. (2016)

Panelist, Education Writers Association National Seminar, Boston University. (2016)

Speaker, American Savings Foundation and the National Scholarship Providers Association. "Nudging Students Toward Success." Hartford, CT. (2016)

Panelist, Institute of Education Sciences (IES) PI Meeting, Postsecondary Program Meeting. "Behavioral Economics and College Persistence." (2015)

Seminar Presenter, National Bureau of Economic Research (NBER)-China Center for Economic Research at Peking University (CCER) Conference on China and the World Economy in Beijing, China. "Making College Accessible to Disadvantaged Students: Lessons from the American Higher Education System." (2014)

Speaker, New England Board of Higher Education, "Redesigning Student Aid in New England" (2014)

Panelist, SxSW edu Conference, "Empowered to Act: Postsecondary Innovation Zones" (2014)

Invited Speaker, AERA Presidential Session, Annual Meetings (2014) "Innovations in Access to and Success in College."

Lecture, "The Role of Remediation and Developmental Courses in Access and Persistence." (with Angela Boatman). Advisory Committee on Student Financial Assistance, Seminar Series on College Access, Persistence, and Success. (2012)

Moderator and Co-Planner, "Evaluating President Obama's 2020 College Graduation Goal." Participants: Martha Kanter, Under Secretary, U.S. Department of Education; Rolando Montoya, Provost, Miami Dade College; Hilary Pennington, Former Director of Education, Postsecondary Success, and Special Initiatives, Bill & Melinda Gates Foundation. Askwith Forum, Harvard Graduate School of Education (2012)

Presenter, H.ED. Talks, "Nudging Students to College Success: Could a small change make a big difference on persistence?" Achieving the Dream (ATD) State Policy Meeting (2012)

Panel Member, "Setting the Stage Nationally: Opportunities for Systems Change." The Boston Foundation, Funder Convening: *College Access & Success: What Will It Take?* (2012)

Moderator and Presenter, "Evidence—Action—Innovation: A College Completion Symposium," U.S. Department of Education. (2012)

Presenter, Federal Reserve Bank of Atlanta, Center for Human Capital Studies. "Addressing the Needs of the Underprepared: The Role of Postsecondary Remediation." Employment and Education Conference, September 29-30. (2011)

Participant, Consumer Information in Higher Education, meeting sponsored by the Bill & Melinda Gates Foundation and Margaret Spellings & Company (2011)

Guest Speaker, Lumina Foundation for Education Board Meeting. Cambridge, MA. (2010)

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Speaker, National Conference of State Legislators (NCSL) Spring Forum. "Increasing Postsecondary Enrollment among Low-Income Families: Results from the FAFSA Experiment." (2009)

Featured Speaker, College Access Symposium, Tufts University. "College Access and Success: Key Barriers and Potential Solutions." (2009)

Panelist, Harvard University Inauguration of President Drew Faust, Faculty Symposium: "Inequality and Justice in the Twenty-First Century." (2007)

Public Lecture, University of Wisconsin-Madison, Wisconsin Center for the Advancement of Postsecondary Education (WISCAPE), Forum on the Consequences of Merit-Based Student Aid. Madison, WI (2006)

Featured Speaker, Massachusetts Association of Student Financial Aid Administrators (MASFAA): "College Access in the New Millennium: How is Massachusetts doing?" (2006)

Featured Presenter and Panel Member, MassINC Distinguished Panel: "Paying for College: The Rising Cost of Higher Education" (2006)

Forum on Extending Opportunity in Higher Education, New York University, Steinhardt Institute for Higher Education Policy. Respondent to William Bowen. New York, NY (2005)

Panelist and Moderator, "Access to Higher Education: Barriers and Strategies for Improvement" Harvard Kennedy School of Government, Black Policy Conference. Cambridge, MA (2005)

Respondent, Advisory Committee on Student Financial Aid (ACSFA), Access and Persistence Symposium. Washington, DC (2005)

Seminar Presenter, "The Hopes and Realities of Higher Education in the United States." Berlin Dialogues, sponsored by the Center for European Studies at Harvard University and Wissenschaftszentrum Berlin. Session: "Social Determinism vs. Equal Opportunity: Access to Higher Education in Germany and the United States." Berlin, Germany (2004)

PAST PROFESSIONAL SERVICE (*selected*)

Member, Research Advisory Committee, Admissions Research Consortium, College Board (2021 to 2023)

Member, Technical Working Group (TWG), Upward Bound Evaluation, U.S. Department of Education (2014-20)

Selection Committee Member, AERA Palmer O. Johnson Award (2020 and 2021)

Advisory Board Member, Inversant. Formerly Families United in Educational Leadership (FUEL) (2010-19)

Inaugural Review Panelist, Lyle Spencer Research Awards, Spencer Foundation (2014-16)

Data Advisory Group, American Academy of Arts & Sciences, Commission on Undergraduate Education (2015-16)

Facilitator, Financial Aid Summit, Buckingham Browne & Nichols (2014 -16)

Judge, Robin Hood Foundation, College Success Prize (2014)

Selection Committee and Faculty Mentor, David L. Clark Graduate Student Research Seminar in Educational Leadership and Policy, American Educational Research Association (2013-14)

Research Consultant, USA Funds, School and Student Services Committee. Designing an evaluation of a financial literacy curriculum and online student loan tool (2012-13)

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Selection Committee, National Academy of Education/Spencer Foundation Dissertation Fellowship (2012)

Mentor, NAE/Spencer Fall Fellow Retreat (2012)

Member, College Board Pell Grant Sustainability Study Group (2011-13)

External Advisory Committee, Massachusetts Race to the Top (2010-13)

Education Advisory Group, I Have a Dream Foundation (2008-2013)

Task Force Member, "Rethinking Financial Aid." The College Board. (2006-12)

Member, Technical Review Panel, 2008 National Postsecondary Student Aid Survey, U.S. Department of Education (2006-12)

American Enterprise Institute (AEI), Higher Education Reform Forum Working Group (2009-12)

Policy Research Panel, Advisory Committee on Student Financial Assistance. Advising on the first and second annual reports due to the U.S. Congress. (2009-12)

Expert Briefing, Bill & Melinda Gates Foundation, Co-Chair Learning Session on the Postsecondary Success strategy with Bill Gates (2011)

Contributor, White House Convening on Consumer Information in Higher Education (2011)

Advisory Committee, Completion Innovation Challenge (2011) An initiative funded by the Bill & Melinda Gates Foundation and directed by Complete College America.

Research Advisor, Bill & Melinda Gates Foundation, U.S. Program Postsecondary Success Initiative (2009, 2011)

Fall Conference Program Review Committee, Association for Public Policy Analysis and Management (APPAM) (2009 and 2010)

Chair, Institute of Education Sciences, Education Systems and Broad Reform Scientific Review Panel (2009), Member (2007-09)

Research Advisory Board Member, Education Sector (2006-2010)

Technical Advisory Committee, College Results Online, The Education Trust. Advised on the development of a web tool that enables students and colleges compare the graduation rates of peer institutions (2004-10)

External Reviewer, CERGE-EI / Global Development Network Global Research Competition (2004-09)

Advisory Committee Member, Center for Policy Analysis, American Council on Education (2007-09)

Advisor to the Chancellor of the Ohio Board of Regents (2007-08)

Lumina Foundation for Education, Research Advisory Committee (2006-08)

Advisory Committee, The Working Poor and College Access & Affordability Project, Institute of Higher Education Policy (2006-07)

Senior Scholar, Spencer Dissertation Fellows Fall Workshop (2006)

Contributor, "Advancing the Understanding of the Relationship between Education and Labor Market Outcomes." National Opinion Research Center (NORC), University of Chicago (2006)

Social Science Research Council (SSRC), Transitions to College Project, Project Member (2003-06)

Research Advisor, Massachusetts Board of Higher Education, Task Force on Student Financial Aid (2005-06)

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Research Consultant, Best Associates, Project on the Return to Education (2005-06)

Advisory Board, Study of New Scholars – Principal Investigators: Drs. Richard Chait and Cathy Trower (2003-05)

Contributor, National Center for Higher Education Management Systems, Invitational meeting on state- and system-level educational databases. Boulder, CO (2005)

Roundtable Participant, Institute of Education Sciences. Discussion of Postsecondary Research Priorities (2005)

Research Consultant, National Association of Independent Schools, Financing Affordable Schools Think Tank (2005)

Higher Education Advisory Board, Harvard Civil Rights Project (2003-07)

Roundtable Participant, American Academy of Arts and Sciences, Initiative for Humanities and Culture. Cambridge, MA (2003)

Faculty Advisor, Social Science Research Council, Applied Economics Program (2001-03)

Roundtable Participant, American Academy of Arts and Sciences, Initiative on Diversity. Cambridge, MA (2001)

Referee: *Quarterly Journal of Economics*, *Review of Economics and Statistics*, *Journal of Labor Economics*, *Journal of Econometrics*, *Journal of Public Economics*, *Journal of Human Resources*, *Economic Journal*, *B.E. Journals in Economic Analysis and Policy*, *Journal of Policy Analysis and Management*, *Journal of Student Financial Aid*, *Economics of Education Review*, *Educational Evaluation and Policy Analysis*, *Review of Higher Education*, *Social Science Quarterly*, *Education Finance and Policy*, *Review of Educational Research*, National Science Foundation, National Center of Education Statistics, Institute of Education Sciences, The Smith Richardson Foundation, The Spencer Foundation, Harvard University Press, Princeton University Press, Stanford University Press.

UNIVERSITY LEADERSHIP AND SERVICE (*selected*)

Past Administrative Appointments

Academic Dean, Harvard Graduate School of Education (2013-17). Oversaw Academic Affairs, including master's and doctoral programs, faculty reviews and searches, faculty governance, student disciplinary cases, and developed faculty and student resources.

Faculty Director, Ed.D., Harvard Graduate School of Education (2010-13).

Chair of the Ed.D. Steering Committee and the Ed.D. Admissions Committee

Chair, Ph.D. Steering Committee, Joint committee with the Harvard Graduate School of Arts and Sciences (2012-13)

Committee Leadership, Harvard Graduate School of Education

Chair, Committee on Professional Education, (2015-17)

Chair, Master's Programs Steering Committee (2014-15), Master's Program Directors Committee (2013-14)

Chair, Online Strategy Workgroup (2013-14), Online Education Committee (2014-15)

Chair, Faculty Space Committee (2013-14)

Chair, Master's Program Strategic Workgroup (2008-09)

Chair, Enrollment Services Committee (2002-04)

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

University Committee Service, Harvard University

Scholars at Risk Selection Committee, Harvard University (2023 and 2024)
Salata Institute for Climate and Sustainability, Faculty Steering Committee (2023 and 2024)
Member, Harvard University Task Force on the Future of Teaching and Learning (2021)
Instructor, Harvard Talent Development Program (2015 and 2017)
Member, Harvard University Presidential Search, Faculty Advisory Committee (2017)
Member, HarvardX Research Committee (2012-17)
Member, Task Force on Sexual Assault Prevention (2014-16); Sub-Committee on Survey Design
Admissions Committee Member, Harvard Crimson Academy (2014-15)
Member, Committee to Establish Metrics for the Cost of Higher Education (2014-15)
Member, Provost Academic Leadership Forum (2013-2014)
Review Committee, Bureau of Study Counsel (2011)
Admissions Committee, Crimson Summer Academy, Harvard University (2005-06)

TEACHING EXPERIENCE

Teaching in Degree Programs

Harvard Graduate School of Education (2000 to present) – graduate-level courses:

- *The Economics of Higher Education: Access, Outcomes, and Competition* (module: spring 2015, spring 2016, fall 2016)
- *The Economics of Colleges and Universities: Price, Costs, and Value* (full course 2003-2013)
- *The Role of Policy in College Access and Success* (2003-2010)
- *Microeconomics: A Policy Tool for Educators* (2001, 2005, 2008)
- *Student Achievement: The Role of Resources and Governance* (2001, 2002)

Teaching Fellow, Harvard University, Department of Economics. *The Economics of Education* (1997-98); *Thesis Tutorial in Labor Economics* (1998-99 and 1999-2000); *Thesis Tutorial in Urban Economics* (1996-97 and 1997-98)

Teaching in Harvard Professional Education Programs

Harvard Institute for Educational Management (IEM) (2001 to present)

- “The Economics of Higher Education: Managing Resource Challenges in the Face of Competition and Accountability”
- “Enrollment Management, Financial Aid, and Competition in Higher Education”
- “Student Access and Affordability: Trends in Higher Education Policy”

Harvard Institute for Management and Leadership in Education (MLE). “The Triple Bind: Keeping Revenues, Expenditures, and Students in Balance.” (2009 to present)

Harvard Management Development Program (MDP) “The Economics of Higher Education: Balancing Resource Challenges with Mission.” (2023 to present)

Leading for Student Success in Higher Education Institute. “Promising Practices: Research-Based Approaches for Supporting Student Success.” (2019 to 2022)

Post-Secondary Success: In Schools, Communities, and Families (HGSE Professional Education Program). “Improving Student Success: Challenges and Promising Interventions.” (2017 to

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

present)

Harvard Education Grantmakers Institute, "Higher Education Performance and the Push for Accountability" (2016), and "Using Research and Evaluation to Advance Public Policy: The Case of the FAFSA Experiment." (2009)

Harvard Institute for Higher Education, Program on Performance Assessment in Higher Education. "Economic Perspectives on Outcomes Assessment: Fostering Informed Accountability." (2011, 2012, 2014)

Harvard Institute for Higher Education, Shaanxi (China) Leadership Program. "Management and Innovation of Higher Education." (2010)

Harvard Administrative Fellows Program (2004-06)

Harvard Seminar for Chinese University Presidents. "Models of Financing Higher Education in the U.S." (2005)

Harvard Institute for Independent Schools. "Tuition, Financial Aid, and Enrollment Management: What can Independent Schools Learn from Higher Education?" (2005)

LASPAU: Academic and Professional Programs for the Americas, Program in Financial Leadership for Higher Education. "Higher Education Funding and Policy: What can We Learn from the American System?" (2002)

Other Professional Education for Policymakers and Practitioners

"What the Changing Demographics Mean for Supporting Students at Selective Colleges & Universities." COFHE Financial Aid Officer Retreat (2017).

Postsecondary National Policy Institute (PNPI), Federal Student Aid Bootcamp. "What do we know about the Impact of Federal Student Aid?" Washington, DC. (2016)

"The Changing Face of College." Education Writers Association, Higher Education Seminar (2013)

Postsecondary National Policy Institute, Student Aid Seminar. "Financial Assistance and College Access." (2012)

"Research, Design and Analysis in Education." Education Writers Association Regional Seminar, Education Research and Statistics Bootcamp. With Judy Singer. (2009)

Harvard Program for Newly Elected Members of Congress. "Public Education: What can Congress do?" (2008)

National Conference of State Legislators (NCSL) Leadership Forum, Harvard Kennedy School. "Higher Education Policy: What is the State's Role?" (2007)

DOCTORAL ADVISING (*graduates*)

Anjali Adukia (chair)	Ron Brown (member)	Ivelys Figueroa (member)
Scott Barge (member)	Juan Carlos Calcagno	Stella Flores (chair)
D'Wayne Bell (chair)	(member)	Hester Fuller (chair)
Melissa Bert (chair)	Ben Castleman (chair)	Alexis Gable (chair)
Angela Boatman (chair)	Monnica Chan (chair)	Liliana Garces (chair)
Tolani Britton (chair)	Baoyan Cheng (chair)	Greg Harris (chair)
Neal Brown (member)	Jorge Encinas (chair)	Jodut Hashmi (chair)

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Darryl Hill (chair)	Nahoko O'Connor Kawakyu	Adela Soliz (chair)
Michael Hurwitz (co-chair)	(member)	George Spencer (member)
Joie Jager-Hyman (chair)	Jennifer Price (chair)	Marie-Andree Somers (co-
Whitney Kozakowski (member)	Richard Reddick (chair)	chair)
Zach Mabel (chair)	Hanna Rodriguez-Farrar	Susan Sporte (chair)
John McLaughlin (member)	(chair)	Jennifer Steele (member)
Preeya Mbekeani (member)	Brendan Russell (member)	Kim Truong (member)
	Matthew Shaw (chair)	
	Lena Shi (chair)	

OTHER EMPLOYMENT

Associate Director of Undergraduate Studies, Economics Department, Harvard University - Cambridge, MA (1997-2000). Responsible for the Undergraduate Honors Thesis Program.

Economic Consultant, Harvard Institute for International Development (HIID) - Alajuela, Costa Rica (1997)

Investment Banking Analyst, Goldman, Sachs & Company - New York, NY (1994)

Founder and Community Service Director, Redding Circle Homework Center - Princeton, NJ (1992-94)

Urban Programs Division Intern, New Jersey Economic Development Authority - Trenton, NJ (1994)

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

APPENDIX B
MATERIALS RELIED UPON

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Legal Documents

Cornell University's First Supplemental Responses and Objections to Plaintiffs' Second Set of Interrogatories, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.) (N.D. Ill.), December 22, 2023.

Plaintiff Alexander Leo-Guerra's Second Supplemental Responses and Objections to Defendants' First Set of Interrogatories, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), August 24, 2023.

Plaintiff Andrew Corzo's Supplemental Responses and Objections to Defendants' First Set of Interrogatories, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), June 28, 2023.

Plaintiff Benjamin Shumate's Supplemental Responses and Objections to Defendants' First Set of Interrogatories, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), June 27, 2023.

Plaintiff Brandon Piyevesky's Supplemental Responses and Objections to Defendants' First Set of Interrogatories, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), January 4, 2023.

Plaintiff Brittany Tatiana Weaver's Supplemental Responses and Objection to Defendants' First Set of Interrogatories, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), January 5, 2023.

Plaintiff Cameron Williams' Responses and Objections to Defendants' First Set of Interrogatories, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), February 2, 2023.

Plaintiff Michael Maerlender's Responses and Objections to Defendants' First Set of Interrogatories, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), October 19, 2022.

Plaintiff Sia Henry's Supplemental Responses and Objections to Defendants' First Set of Interrogatories, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), June 26, 2023.

Responses to Schedule B to Plaintiffs' 30(b)(6) deposition notice to Georgetown University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), May 7, 2024.

Second Amended and Supplemental Class Action Complaint, *Henry, et al. v. Brown University*, 1:22-cv-00125 (N.D. Ill.), February 6, 2023.

University of Notre Dame's Responses and Objections to Plaintiffs' Second Set of Interrogatories to All Defendants, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), October 30, 2023.

University of Pennsylvania's Amended Responses and Objections to Plaintiffs' Second Set of Interrogatories to All Defendants, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), January 5, 2024.

Vanderbilt Software Settings, Email containing attachment: 'Vanderbilt Software Settings - ATTORNEYS EYES ONLY.xlsx', November 13, 2023.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Expert Reports (Including Reliance Materials)

Expert Report of Elizabeth Mora, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), May 14, 2024.

Expert Report of George Bulman, Ph.D., *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), May 14, 2024.

Expert Report of Hal J. Singer, Ph.D. (Errata II Updated), *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), June 10, 2024.

Depositions and Associated Exhibits

Deposition of Alexander Leo-Guerra, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), August 25, 2023.

Deposition of Andrew Corzo, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), September 8, 2023.

Deposition of Anne Walker, Director of Financial Aid at Rice University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), September 8, 2023.

Deposition of Ashley Pallie, Executive Director and Chief Admissions Officer, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), December 15, 2023.

Deposition of Benjamin Shumate, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), September 12, 2023.

Deposition of Brandon Piyevesky, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), August 28, 2023.

Deposition of Brent Tener, Director of Student Financial Aid and Undergraduate Scholarships at Vanderbilt University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), July 12, 2023.

Deposition of Brian Hill, Associate Vice Provost for Student Finances and Enrollment Systems at Carnegie Mellon University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), March 14, 2024.

Deposition of Brittany Weaver, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), November 14, 2023.

Deposition of Caesar Storlazzi, Director of Student Financial Services at Yale University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), July 27, 2023.

Deposition of Cameron Williams, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), September 7, 2023.

Deposition of Christopher Watson, former Dean of Undergraduate Enrollment at Northwestern University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), October 10, 2023.

Deposition of David Dukor-Jackson, Director of Admissions at Massachusetts Institute of Technology, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), May 9, 2022.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Deposition of David Meade, Vice President of Financial Aid Programs and Services at CollegeBoard, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), May 2, 2024.

Deposition of David Phillips, Vice Provost for Admissions and Financial Aid at Johns Hopkins University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), January 8, 2024.

Deposition of Don Betterton, Director of Financial Aid at Princeton University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), February 22, 2024.

Deposition of Douglas Christiansen, Vice Provost for University Enrollment Affairs and Dean of Admissions and Financial Aid at Vanderbilt University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), December 1, 2023.

Deposition of Elaine P. Varas, Senior University Director of Financial Aid at University of Pennsylvania, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), March 18, 2024.

Deposition of Elaine P. Varas, Senior University Director of Financial Aid at University of Pennsylvania, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), August 2, 2023.

Deposition of Eric Furda, former Dean of Admissions at University of Pennsylvania, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), March 26, 2024.

Deposition of Eric Furda, former Dean of Admissions at University of Pennsylvania, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), November 16, 2023.

Deposition of James Tilton, Dean of Financial Aid at Brown University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), May 15, 2023.

Deposition of Janet Rapelye, President of COFHE, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), January 22, 2024.

Deposition of Janice Coleman, Assistant Director of Financial Aid at Duke University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), September 15, 2023.

Deposition of Jarrid Whitney, former Assistant Vice President for Student Affairs, Enrollment and Career Services and Executive Director of Admissions & Financial Aid at California Institute of Technology, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), January 19, 2024.

Deposition of Jeffrey Gall, Associate Dean at Georgetown University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), January 19, 2024.

Deposition of John Affleck-Graves, Professor of Finance in the Department of Finance at University of Notre Dame, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), January 24, 2023.

Deposition of John DeGioia, President of Georgetown University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), February 16, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Deposition of John Gaines, former Associate Dean of Undergraduate Admissions at Vanderbilt University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), August 3, 2023.

Deposition of John McLaughlin, former Vice Dean and Director of Admissions at University of Pennsylvania, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), July 12, 2023.

Deposition of Joseph Russo, former Director of Financial Aid at University of Notre Dame, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), November 30, 2023.

Deposition of Karen Cooper, Associate Dean and Director of Financial Aid at Stanford University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), March 27, 2024.

Deposition of Kathryn Tuman, former Executive Director of Financial Aid at Columbia University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), September 8, 2023.

Deposition of Leslie Bridson, Director of Student Financial Services at Massachusetts Institute of Technology, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), July 13, 2013.

Deposition of Lynn Higinbotham, Associate Vice President of Enrollment Management at New York University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), April 12, 2024.

Deposition of Malina Chang, Director of Student Financial Aid at California Institute of Technology, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), September 13, 2023.

Deposition of Matthew McGann, Dean of Admission and Financial Aid at Amherst College, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), April 12, 2024.

Deposition of Matthew Sessa, Executive Director of Student Registration and Financial Services at University of Pennsylvania, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), December 15, 2023.

Deposition of Megan Chan, Associate Dean of Financial Aid at University of Southern California, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), April 16, 2024.

Deposition of Michael Hall, Executive Director of Financial Aid at Columbia University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), September 13, 2013.

Deposition of Michael Maerlender, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), September 18, 2023.

Deposition of Miranda McCall, Director of Undergraduate Financial Support at Duke University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), August 29, 2023.

Deposition of Paul Streeter, Vice President for Budget and Planning at Cornell University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), January 26, 2024.

Deposition of Sarah Donahue, former Director of Financial Aid at Harvard University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), March 26, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Deposition of Scott Wallace-Juedes, former Director of Undergraduate Financial Aid at Yale University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), July 7, 2023.

Deposition of Shane Maloney, Associate Director of Federal Awards at University of Wisconsin-Madison, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), March 26, 2024.

Deposition of Sia Henry, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), September 15, 2023.

Deposition of Stuart Schmill, Dean of Admissions and Student Financial Services at Massachusetts Institute of Technology, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), June 28, 2023.

Deposition of Thomas McDermott, Associate Vice Provost for Financial Aid at Johns Hopkins University, *Henry, et al. v. Brown University, et al.*, 1:22-cv-00125 (N.D. Ill.), August 18, 2023.

Bates-Stamped Documents and Data¹

BROWN_0000000154 ("Comparison of 568 Group, Brown, and Federal Methodology," Brown University, January 24, 2007).

BROWN_0000000863 ("Financial Aid Advisory," Brown University, 2016).

BROWN_0000001071 ("Financial Aid Budget Projections - FY2008," Brown University).

BROWN_0000015931 ("Proposals for Revising Aid Programs 2009-10," Brown University, 2009-2010).

BROWN_0000032552 ("2010-2011 Need Analysis Global Policy Options Rules," Brown University, 2010-2011).

BROWN_0000035413 ("2011-2012 Need Analysis Global Policy Options Rules," Brown University, 2011-2012).

BROWN_0000050379 ("Financial Aid Office: Undergraduate Overview," Brown University, 2014).

BROWN_0000050700 ("2015-2016 Global Options Rule Changes," Brown University, 2015-2016).

BROWN_0000053021 ("2016-2017 Global Options Rule Changes," Brown University, 2016-2017).

BROWN_0000055382 ("2017-2018 Global Options Rule Changes," Brown University, 2017-2018).

BROWN_0000274352 ("Pre-Read for Outreach Initiatives and Recruitment of Students from Low-Income Backgrounds," Brown University, May 30-June 1, 2013).

BROWN_0000279244 ("Admitted Student Questionnaire Plus - Brown University Highlights Report," The College Board, 2014).

¹ Bates-stamped documents are cited with the first number of the document.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

BROWN_0000331819 ("COFHE Yellowbook for 2014-2015," Consortium on Financing Higher Education 2014-2015).

BROWN_0000334010 ("COFHE Yellowbook for 2019-2020," Consortium on Financing Higher Education, 2019-2020).

CALTECH000000606 ("Understanding Holistic Review in Higher Education Admissions," CollegeBoard, November 2018).

CALTECH000001583 ("Email with subject line 'Fw: Reminder -Retirement Allowance Tools'," June 4, 2019).

CALTECH000004708 ("Admissions Summary," California Institute of Technology, June 2020).

CALTECH00001193 ("Verification and Needs Analysis Manual 2022-2023," California Institute of Technology, 2022-2023).

CALTECH00001341 ("Verification and Needs Analysis Manual 2021-2022," California Institute of Technology, 2021-2022).

CALTECH000013902 ("Verification and Needs Analysis Manual 2020-2021," California Institute of Technology, 2020-2021).

CALTECH000032754 ("Admitted Student Questionnaire Plus - California Institute of Technology Competitor Analysis," The College Board, 2017).

CALTECH000038819 ("Summary Report of the Freshman Admissions Committee," California Institute of Technology, June 12, 2017).

CALTECH000046608 ("Admitted Student Questionnaire Plus - California Institute of Technology Competitor Analysis," The College Board, 2018).

CALTECH000049905 ("Cost of Moving to IM," California Institute of Technology, 2022).

CALTECH000055886 ("PowerFAIDS Administration - Production 2022-2023," California Institute of Technology, 2022-2023).

CALTECH000055902 ("PowerFAIDS Administration - Production 2017-2018," California Institute of Technology, 2017-2018).

CBD000001 ("2003-2004 School Year IM Users' Guide," The College Board, 2003).

CBD000546 ("CSS/Financial Aid Profile User's Guide," CollegeBoard, 2005-2006).

CBD001802 ("CSS/Financial Aid Profile Users' Guide," CollegeBoard, 2012-2013).

CBD004281 ("2003-2004 Institutional Methodology (IM) Computation Tables," CollegeBoard).

CBD004286 ("2004-2005 Institutional Methodology (IM) Computation Tables," The College Board).

CBD004291 ("2004-2005 Institutional Methodology (IM) Computation Tables," CollegeBoard).

CBD004296 ("2006-2007 Institutional Methodology (IM) Computation Tables," CollegeBoard).

CBD004301 ("2007-2008 Institutional Methodology (IM) Computation Tables," CollegeBoard).

CBD004306 ("2008-2009 Institutional Methodology (IM) Computation Tables," CollegeBoard).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

CBD004311 ("2009-2010 Institutional Methodology (IM) Computation Tables," CollegeBoard).
CBD004316 ("2010-2011 Institutional Methodology (IM) Computation Tables," CollegeBoard).
CBD004321 ("2011-2012 Institutional Methodology (IM) Computation Tables," CollegeBoard).
CBD004326 ("2012-2013 Institutional Methodology (IM) Computation Tables," CollegeBoard).
CBD004331 ("Institutional Methodology Tables: 2013-14 School Year," CollegeBoard, November 21, 2012).
CBD004345 ("Institutional Methodology Tables: 2014-15 School Year," CollegeBoard, August 23, 2013).
CBD004359 ("Institutional Methodology Tables and Worksheets: 2015-16 School Year," CollegeBoard, March 3, 2015).
CBD004373 ("Institutional Methodology Tables and Worksheets: 2016-17 School Year," College Board, August 10, 2015).
CBD007089 ("Institutional Needs Analysis System User Guide," CollegeBoard, 2015).
CBD008184 ("Global Options Board," Rice University, August 7, 2017).
CBD008261 ("School Service Options 2018-2019," College Board, September 21, 2023).
CBD008263 ("School Service Options 2019-2020," College Board, September 21, 2023).
CBD008338 ("School Service Options 2020-2021," College Board, September 21, 2023).
CBD008340 ("School Service Options 2021-2022," College Board, September 21, 2023).
CBD008413 ("School Service Options 2022-2023," College Board, September 21, 2023).
CBD008556 ("Setting Your CSS Profile & IDOC Service Options: What's New and Trending," CollegeBoard, August 8, 2019).
COFHE-02-00002603 ("Report of the Common Standards Subcommittee to the 568 Presidents' Working Group," Consortium on Financing Higher Education, June 2001).
COFHE-02-00003005 ("The 568 Presidents' Group Consensus Methodology Policy Guidelines 2004-05," 568 Presidents' Group).
COFHE-02-00009085 ("Materials for the Next Meeting on September 13," 568 Presidents' Working Group, September 3, 1999).
COFHE-02-00013416 ("Recent Meeting of the Group, Aid Directors at Section 568 Signatory Institutions," Consortium on Financing Higher Education, December 11, 1995).
COFHE-02-00013436 ("Institutional Need Analysis: An Uneasy Present An Uncertain Future," Consortium on Financing Higher Education, 1995).
COFHE-02-00015316 ("Fallout from the Economy: Financial Aid Implications," 568 Presidents' Group, January 28, 2009).
COFHE-02-00026553 ("Sources of Undergraduate Grant Aid at the COFHE Institutions 1988-89 to 1990-91," Consortium on Financing Higher Education, November 1990).
Columbia_00058506 ("Financial Aid Policy Discussion," Columbia University, April 9, 2014).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Columbia_00059052 ("Whither Consensus Survey," 568 Presidents' Group, January 2015).

Columbia_00060605 ("568 Presidents' Group Meeting," Columbia University, January 26, 2016).

Columbia_00140806 ("Financial Aid Policies," Columbia University, 2017-2018).

Columbia_00277674 ("COFHE Yellowbook for 2019-2020," Consortium on Financing Higher Education, 2019-2020).

Columbia_00279756 ("Sources of Undergraduate Grant Aid at the COFHE Institutions: 2014-2015 Academic Year," Consortium on Financing Higher Education, March 1, 2016).

Columbia_00293568 ("Columbia Financial Aid NA Policy Itemization," Columbia University, February 4, 2022).

CORNELL_LIT0000020942 ("Admissions and Enrollment Statement on PeopleSoft Student Recruiting and Guiding Principles and Guidelines," Cornell University, 2007).

CORNELL_LIT0000110986 ("March 2008 Comparison of Ivies," Cornell University).

CORNELL_LIT0000129747 ("FA App Review Procedures AY 2015-2016," Cornell University).

CORNELL_LIT0000129866 ("Financial Aid Application Review Procedures 2020-2021," Cornell University).

CORNELL_LIT0000183508 ("COFHE Yellowbook for 2015-2016," Consortium on Financing Higher Education, 2015-2016).

CORNELL_LIT0000199191 ("October 2008 Comparison of Ivies," Cornell University).

CORNELL_LIT0000213572 ("2022-2023 Undergraduate Need Analysis and Packaging Policies," Cornell University, 2022-2023).

CORNELL_LIT0000213959 ("COFHE Yellowbook for 2019-2020," Consortium on Financing Higher Education, 2019-2020).

CORNELL_LIT0000245115 ("Undergraduate Financial Aid Task Force - Final Report," Cornell University, April 27, 2012).

CORNELL_LIT0000246894 ("568 Presidents Group Winter Meeting," Cornell University, January 26, 2016).

CORNELL_LIT0000247939 ("Socioeconomic Diversity Among Cornell Undergraduates," Cornell University, February 1, 2016).

CORNELL_LIT0000252669 ("Results of Consensus Methodology Questionnaire," Cornell University, January 2015).

CORNELL_LIT0000253271 ("Financial Aid Application Review Procedures 2016-2017," Cornell University).

CORNELL_LIT0000265331 ("Financial Aid Application Review Procedures 2021-2022," Cornell University, 2021-2022).

CORNELL_LIT0000266293 ("Financial Aid Application Review Procedures 2014-2015," Cornell University).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

CORNELL_LIT0000267514 ("Financial Aid Application Review Procedures 2018-2019," Cornell University).

CORNELL_LIT0000269140 ("Financial Aid Application Review Procedures 2019-2020," Cornell University).

CORNELL_LIT0000269951 ("Financial Aid Application Review Procedures 2012-2013," Cornell University).

CORNELL_LIT0000284455 ("Competitor Analysis," Cornell University, 2015).

CORNELL_LIT0000304293 ("Policy and Procedure Manual 2004-2005," Cornell University, 2004-2005).

CORNELL_LIT0000335803 ("Need Analysis Compare – Institutional Methodology," Cornell University, February 21, 2022).

CORNELL_LIT0000357469 ("Presidential Briefing: Undergraduate Financial Aid," Cornell University, April 2015).

CORNELL_LIT0000378159 ("Financial Aid Application Review Procedures 2017-2018," Cornell University).

CORNELL_LIT0000378722 ("Financial Aid Application Review Procedures 2022-2023," Cornell University).

CORNELL_LIT0000379145 ("2022-23 Policy and Procedures," Cornell University Office of Financial Aid and Student Employment, 2022-2023).

CORNELL_LIT0000390185 ("Policy and Procedure Manual 2005-2006," Cornell University, 2005-2006).

DARTMOUTH_0000000001 ("Financial Aid Handbook," Dartmouth College, 2022-2023).

DARTMOUTH_0000000086 ("Financial Aid Handbook," Dartmouth College, 2021-2022).

DARTMOUTH_0000000172 ("Financial Aid Handbook," Dartmouth College, 2018-2019).

DARTMOUTH_0000000258 ("Financial Aid Handbook," Dartmouth College, 2017-2018).

DARTMOUTH_0000000300 ("Financial Aid Handbook," Dartmouth College, 2016-2017).

DARTMOUTH_0000000384 ("Financial Aid Handbook," Dartmouth College, 2015-2016).

DARTMOUTH_0000000425 ("Financial Aid Handbook," Dartmouth College, 2014-2015).

DARTMOUTH_0000000467 ("Financial Aid Handbook," Dartmouth College, 2013-2014).

DARTMOUTH_0000000509 ("Financial Aid Handbook," Dartmouth College, 2012-2013).

DARTMOUTH_0000004744 ("2013-2014 Dartmouth Scholarship Eligibility Guidelines," Dartmouth College, 2013-2014).

DARTMOUTH_0000061396 ("Financial Aid Handbook," Dartmouth College, 2005-2006).

DARTMOUTH_0000076957 ("2007-2008 Dartmouth Scholarship Eligibility Guidelines," Dartmouth College, 2007-2008).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

DARTMOUTH_0000076986 ("2006-2007 Dartmouth Scholarship Eligibility Guidelines," Dartmouth College, 2006-2007).

DARTMOUTH_0000077049 ("2010-2011 Dartmouth Scholarship Eligibility Guidelines," Dartmouth College, 2010-2011).

DARTMOUTH_0000077411 ("2014-2015 Dartmouth Scholarship Eligibility Guidelines," Dartmouth College, 2014-2015).

DARTMOUTH_0000077436 ("2011-2012 Dartmouth Scholarship Eligibility Guidelines," Dartmouth College, 2011-2012).

DARTMOUTH_0000077826 ("2012-2013 Dartmouth Scholarship Eligibility Guidelines," Dartmouth College, 2012-2013).

DARTMOUTH_0000082053 ("A Response to the Draft Report on the Activities of the 568 Report," 568 Presidents' Group, September 5, 2006).

DARTMOUTH_0000091496 ("Retirement Savings Allowance Pilot Project," 568 Presidents' Group).

DARTMOUTH_0000091785 ("Email with subject line 'FW: [568council-list] Professional Judgement and Consensus Methodology Manuals'," January 30, 2017).

DARTMOUTH_0000091786 ("The 568 Presidents' Group Consensus Methodology Policy Guidelines," The 568 Presidents' Group, December 2016).

DARTMOUTH_0000095466 ("Dartmouth College Admissions Student Questionnaire," Dartmouth College, 2015).

DARTMOUTH_0000104498 ("Dartmouth Scholarship Eligibility Guidelines," Dartmouth College, 2015-16).

DARTMOUTH_0000107181 ("Financial Aid Handbook," Dartmouth College Financial Aid Office, 2004-2005).

DARTMOUTH_0000145011 ("Financial Aid Handbook," Dartmouth College, 2009-2010).

DARTMOUTH_0000149919 ("Self-Study of The Dartmouth College Office of Financial Aid," Dartmouth College, 2004-2005).

DARTMOUTH_0000150670 ("Dartmouth Scholarship Eligibility Guidelines," Dartmouth College, 2019-2020).

DARTMOUTH_0000150680 ("Dartmouth Scholarship Eligibility Guidelines," Dartmouth College, 2017-2018).

DARTMOUTH_0000150692 ("Dartmouth Scholarship Eligibility Guidelines," Dartmouth College, 2020-2021).

DARTMOUTH_0000150702 ("Dartmouth Scholarship Eligibility Guidelines," Dartmouth College, 2018-2019).

DARTMOUTH_0000150725 ("Dartmouth Scholarship Eligibility Guidelines," Dartmouth College, 2016-2017).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

DARTMOUTH_0000150737 ("Dartmouth Professional Judgment Guidelines," Dartmouth College, 2019-2020).

DARTMOUTH_0000150774 ("Dartmouth Professional Judgment Guidelines," Dartmouth College, 2020-2021).

DARTMOUTH_0000152040 ("Email with subject line '[568meeting] 568 Manual with TC corrections'," February 10, 2016).

DARTMOUTH_0000152041 ("The 568 Presidents' Group Consensus Methodology Policy Guidelines," The 568 Presidents' Group, November 2015).

DARTMOUTH_0000154245 ("Greater Good vs Institutional Needs," 568 Technical Committee, 2018).

DARTMOUTH_0000164672 ("Endowment Distribution Rate," Dartmouth College).

DARTMOUTH_0000177144 ("COFHE Yellowbook for 2019-2020," Consortium on Financing Higher Education, 2019-2020).

DARTMOUTH_0000359371 ("Membership Dues in Support of The 568 Presidents' Group for FY 2006 and 2007," 568 Presidents' Group, November 28, 2005).

DARTMOUTH_0000382434 ("Dartmouth Scholarship Eligibility Guidelines," Dartmouth College, 2021-2022).

DARTMOUTH_0000382444 ("Dartmouth Professional Judgment Guidelines," Dartmouth College, 2021-2022).

DUKE568_0000902 ("Undergraduate Financial Aid," Duke University, 2013).

DUKE568_0001172 ("Counselor Manual 2012-13, 2013-14," Duke University).

DUKE568_0033960 ("Meeting of the Resources Committee of the Board of Trustees," Duke University, February 26, 2021).

DUKE568_0047904 ("Counselor Guide," Duke University, August 3, 2021).

DUKE568_0052762 ("Paying for College: Students from Middle-Income Backgrounds," The College Board, October 2016).

DUKE568_0052947 ("Institutional Methodology and the New Tax Plan: 568 Presidents Group Meeting," Duke University, May 21, 2018).

DUKE568_0105627 ("Opinion Elite National Survey," Duke University, January 1, 2011).

Emory_568Lit_0000223 ("Email with subject line 'Agenda for Tomorrow's Call'," November 18, 2010).

Emory_568Lit_0000224 ("The 568 Presidents' Group Consensus Methodology Policy Guidelines," The 568 Presidents' Group, November 2010).

Emory_568Lit_0000585 ("Need Analysis Council," 568 Presidents' Group, June 11-12, 2007).

Emory_568Lit_0004292 ("568 Need Analysis Recommendations and Emory Policy Comparison," Emory University).

Emory_568Lit_0007286 ("Chapter 5 File Review and Verification," Emory University, 2015).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Emory_568Lit_0012552 ("Fall 2005 - 2009 Destinations of Non-Matriculating Students," Emory University, 2005 - 2009).

Emory_568Lit_0029694 ("General Financial Aid Policy Comparatives - Common Cross Application Institutions," Emory University, February 21, 2011).

Emory_568Lit_0050864 ("2007 Admitted Student Survey," Emory University, 2007).

Emory_568Lit_0089206 ("Open-Ended Survey Responses," Emory University).

GTWNU_0000000904 ("Policies and Procedures Manual," Georgetown University, 2018-2019).

GTWNU_0000003122 ("Policies and Procedures Manual," Georgetown University, 2011-2012).

GTWNU_0000006234 ("Email with subject line 'Fwd: [568techcommittee] 568 CM Manual Redraft, etc.'," October 14, 2014).

GTWNU_0000006237 ("The 568 Presidents' Group Consensus Methodology Policy Guidelines," The 568 Presidents' Group, January 2013).

GTWNU_0000023265 ("2020 New and Withdrawn Students Survey Results," Georgetown University, August 20, 2020).

GTWNU_0000037560 ("Overview of Admissions and the Alumni Admissions Program (AAP)," Georgetown University, 2020).

GTWNU_0000055122 ("2021 New and Withdrawn Students Survey Results," Georgetown University, September 1, 2021).

GTWNU_0000057730 ("Summary Results: Fall 2016 Admitted and Withdrawn Student Survey," Georgetown University, 2016).

GTWNU_0000057765 ("PSAT/Student Search 2019 Overview," Georgetown University, 2019).

GTWNU_0000109531 ("Policies and Procedures Manual," Georgetown University, 2007-2008).

GTWNU_0000114100 ("Briefing Book," Georgetown University, 2015).

GTWNU_0000141655 ("Email with subject line '[568techcommittee] Draft Revisions of the CM and PJ Manuals'," August 12, 2014).

GTWNU_0000141656 ("The 568 Presidents' Group Consensus Methodology Policy Guidelines," The 568 Presidents' Group, October 2014).

GTWNU_0000166921 ("Counseling Playbook," Georgetown University, 2016-2017).

GTWNU_0000175589 ("Policies and Procedures Manual," Georgetown University, 2009-2010).

GTWNU_0000180770 ("Policies and Procedures Manual," Georgetown University, 2012-2013).

GTWNU_0000181093 ("Policies and Procedures Manual," Georgetown University, 2017-2018).

GTWNU_0000181483 ("Policies and Procedures Manual," Georgetown University, 2015-2016).

GTWNU_0000185821 ("Policies and Procedures Manual," Georgetown University, 2020-2021).

GTWNU_0000186083 ("Policies and Procedures Manual," Georgetown University, 2013-2014).

GTWNU_0000186217 ("Policies and Procedures Manual," Georgetown University, 2014-2015).

GTWNU_0000186485 ("Policies and Procedures Manual," Georgetown University, 2008-2009).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

GTWNU_0000187035 ("Policies and Procedures Manual," Georgetown University, 2006-2007).
GTWNU_0000187364 ("Policies and Procedures Manual," Georgetown University, 2004-2005).
GTWNU_0000195239 ("COFHE Yellowbook for 2016-2017," Consortium on Financing Higher Education, 2016-2017).
GTWNU_0000231076 ("Briefing Document OSFS Operations," Georgetown University, 2014).
GTWNU_0000233337 ("Policies and Procedures Manual," Georgetown University, 2005-2006).
GTWNU_0000244494 ("Appeals," Georgetown University, 2021).
GTWNU_0000250757 ("Briefing Book," Georgetown University, 2016).
GTWNU_0000290054 ("Briefing Book," Georgetown University, 2017).
GTWNU_0000327371 ("Georgetown University Staff for the 1789 Scholarship Imperative Volunteer Pilot Program," Georgetown University, May 2010).
GTWNU_0000347593 ("Policies and Procedures Manual," Georgetown University, 2022-2023).
GTWNU_0000347695 ("Policies and Procedures Manual," Georgetown University, 2021-2022).
GTWNU_0000353731 ("Briefing Book," Georgetown University, 2023).
GTWNU_0000369537 ("Briefing Book," Georgetown University, 2019).
GTWNU_0000381455 ("Software Settings," Georgetown University, 2022-2023).
GTWNU_0000381461 ("Software Settings," Georgetown University, 2021-2022).
GTWNU_0000381467 ("Software Settings," Georgetown University, 2020-2021).
GTWNU_0000381474 ("Software Settings," Georgetown University, 2019-2020).
GTWNU_0000381481 ("Software Settings," Georgetown University, 2018-2019).
GTWNU_0000390613 ("Policies and Procedures Manual 2023-2024," Georgetown University, 2023-2024).
JHULIT_0000001992 ("Email with subject line 'Re: The Realignment/Recruitment from rural areas'," November 2, 2021).
JHULIT_0000117855 ("2022-2023 Undergraduate Advising Guide," Johns Hopkins University).
JHULIT_0000121885 ("22-23 IM Options," Johns Hopkins University, 2022-2023).
JHULIT_0000122562 ("COFHE Yellowbook for 2023-2024," Consortium on Financing Higher Education, 2023-2024).
MIDDLEBURY003632 ("Email with subject line 'Which one is the most recent re-write of the CM manual?'," October 20, 2014).
MIDDLEBURY003665 ("The 568 Presidents' Group Consensus Methodology Policy Guidelines," The 568 Presidents' Group, November 2012).
MITLIT-000001005 ("Need Analysis Manual 2022-2023," Massachusetts Institute of Technology).
MITLIT-000006823 ("Email with subject line 'FW: PJ and CM Manuals'," April 13, 2019).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

MITLIT-000006825 ("The 568 Presidents' Group Consensus Methodology Policy Guidelines," The 568 Presidents' Group, December 2016).

MITLIT-000009988 ("Email with subject line 'FW: Reminder -Retirement Allowance Tools'," March 28, 2019).

MITLIT-000012010 ("Email with subject line 'Re: Update Requested for FY23 Budget'," October 18, 2021).

MITLIT-000025343 ("Class of 2021 Admissions and Financial Aid Update," Massachusetts Institute of Technology, May 23, 2017).

MITLIT-000072948 ("Need Analysis 2011-2012," Massachusetts Institute of Technology, 2011-2012).

MITLIT-000078586 ("Student Financial Services Handbook 2007-2008," Massachusetts Institute of Technology, 2007-2008).

MITLIT-000082703 ("2012-2013 Need Analysis Manual," Massachusetts Institute of Technology).

MITLIT-000085264 ("Need Analysis Manual," Massachusetts Institute of Technology, 2014-2015).

MITLIT-000143168 ("Student Financial Services Handbook 2003-2004," Massachusetts Institute of Technology, 2003-2004).

MITLIT-000152520 ("COFHE Yellowbook for 2018-2019," Consortium on Financing Higher Education, 2018-2019).

MITLIT-000152521 ("COFHE Yellowbook for 2017-2018," Consortium on Financing Higher Education, 2017-2018).

MITLIT-000156260 ("Need Analysis Manual 2018-2019," Massachusetts Institute of Technology).

MITLIT-000156396 ("Need Analysis Manual 2017-2018," Massachusetts Institute of Technology).

MITLIT-000156711 ("Need Analysis Manual 2016-2017," Massachusetts Institute of Technology).

MITLIT-000156834 ("Need Analysis Manual 2015-2016," Massachusetts Institute of Technology).

MITLIT-000231472 ("Needs Analysis Guide 2008-2009," Massachusetts Institute of Technology).

MITLIT-000231867 ("Student Financial Services Handbook 2004-2005," Massachusetts Institute of Technology, 2004-2005).

MITLIT-000232549 ("Student Financial Services Handbook 2006-2007," Massachusetts Institute of Technology, 2006-2007).

MITLIT-000241697 ("COFHE Yellowbook for 2011-2012 Questionnaire," Consortium on Financing Higher Education, 2011-2012).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

MITLIT-000244925 ("Need Analysis 2011-2012," Massachusetts Institute of Technology, 2011-2012).

MITLIT-000245665 ("Student Financial Services Handbook 2005-2006," Massachusetts Institute of Technology, 2005-2006).

MITLIT-000289306 ("Need Analysis Manual 2021-2022," Massachusetts Institute of Technology).

MITLIT-000289402 ("Need Analysis Manual 2020-2021," Massachusetts Institute of Technology).

MITLIT-000289497 ("Need Analysis Manual 2019-2020," Massachusetts Institute of Technology).

MITLIT-000295744 ("Aid Appeal," Massachusetts Institute of Technology, April 21, 2011).

MITLIT-000638535 ("2013-2014 Need Analysis Manual," Massachusetts Institute of Technology).

MITLIT-000646956 ("Need Analysis," Massachusetts Institute of Technology, 2010-2011).

MITLIT-00659580 ("Timeline of Select MIT Financial Aid Policy Changes," Massachusetts Institute of Technology).

ND_0000624 ("2019-20 568 RRET and RSA SURVEY Results, Observations and Recommendations," University of Notre Dame, 2019-2020).

ND_0003702 ("Need Analysis Manual," University of Notre Dame, 2019/2020).

ND_0003713 ("Financial Aid: 2017/2018 Need Analysis Manual," University of Notre Dame, 2017/2018).

ND_0005785 ("Cost of Living (COLA)," University of Notre Dame, 2019/2020).

ND_0005830 ("Tuition Expenses," University of Notre Dame, 2020/2021).

ND_0005951 ("One-Time Income/Distribution," University of Notre Dame, 2019/2020).

ND_0005954 ("Noncustodial Parent Need Analysis Manual," University of Notre Dame, 2019/2020).

ND_0005966 ("Loss of Income/Future Year Income," University of Notre Dame, 2019/2020).

ND_0006363 ("One-Time Income/Distribution," University of Notre Dame, 2018/2019).

ND_0006532 ("Parent Educational Loan Debt," University of Notre Dame, 2020/2021).

ND_0006545 ("2020/2021 Policy & Procedure Manual: Loss of Income/Future Year Income," University of Notre Dame Office of Student Financial Services).

ND_0006586 ("Tuition Expenses," University of Notre Dame, 2021/2022).

ND_0006596 ("Parent Educational Loan Debt," University of Notre Dame, 2021/2022).

ND_0006603 ("One-Time Income/Distribution," University of Notre Dame, 2021/2022).

ND_0006606 ("Noncustodial Parent Need Analysis Manual," University of Notre Dame, 2021/2022).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

ND_0006614 ("Loss of Income/Future Year Income," University of Notre Dame, 2021/2022).

ND_0007470 ("Financial Aid: 2016/2017 Need Analysis Manual," University of Notre Dame, February 16, 2016).

ND_0008133 ("1. Biographic Data," University of Notre Dame, 2018/2019).

ND_0008676 ("Parent Educational Loan Debt," University of Notre Dame, 2018/2019).

ND_0009742 ("Parent Educational Loan Debt," University of Notre Dame, 2022/2023).

ND_0009749 ("One-Time Income/Distribution," University of Notre Dame, 2022/2023).

ND_0009752 ("Noncustodial Parent Need Analysis Manual," University of Notre Dame, 2022/2023).

ND_0009763 ("Loss of Income/Future Year Income," University of Notre Dame, 2022/2023).

ND_0009791 ("1. Biographic Data," University of Notre Dame, 2022/2023).

ND_0011975 ("Email with subject line '[568techcommittee] Draft Meeting Agenda & PJ Manual'," April 16, 2020).

ND_0011976 ("Professional Judgment Guidelines Manual," University of Notre Dame, October 2019).

ND_0014302 ("Income Protection Allowance for Retirement Part 3: The Conversation Continues," University of Notre Dame).

ND_0072531 ("Eldercare," University of Notre Dame, 2019/2020).

ND_0072534 ("Childcare," University of Notre Dame, 2019/2020).

ND_0072536 ("Business Income and Loss (Partnership, S-Corporation, Corporation)," University of Notre Dame, 2019/2020).

ND_0072554 ("2. Income and Benefits," University of Notre Dame, 2019/2020).

ND_0072805 ("Student Assets," University of Notre Dame, 2020/2021).

ND_0072838 ("Home Equity," University of Notre Dame, 2020/2021).

ND_0072847 ("Eldercare," University of Notre Dame, 2020/2021).

ND_0072855 ("Business Income and Loss (Partnership, S-Corporation, Corporation)," University of Notre Dame, 2020/2021).

ND_0072882 ("Student Assets," University of Notre Dame, 2019/2020).

ND_0072889 ("Retirement Assets," University of Notre Dame, 2019/2020).

ND_0072920 ("Home Equity," University of Notre Dame, 2019/2020).

ND_0073192 ("Student Assets," University of Notre Dame, 2018/2019).

ND_0073210 ("Retirement Assets," University of Notre Dame, 2018/2019).

ND_0073229 ("Imputing Assets," University of Notre Dame, 2018/2019).

ND_0073231 ("Home Equity," University of Notre Dame, 2018/2019).

ND_0073242 ("Eldercare," University of Notre Dame, 2018/2019).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

ND_0073249 ("Childcare," University of Notre Dame, 2018/2019).

ND_0073266 ("2. Income and Benefits," University of Notre Dame, 2018/2019).

ND_0073690 ("Home Equity," University of Notre Dame, 2021/2022).

ND_0073725 ("2. Income and Benefits," University of Notre Dame, 2021/2022).

ND_0074808 ("NCPC Need Analysis Philosophy & Guidelines," University of Notre Dame, 2007).

ND_0079290 ("Medical/Dental Expenses," University of Notre Dame, 2019/2020).

ND_0080248 ("2021/2022 Retirement Savings Allowance (RSA)," University of Notre Dame, 2021-2022).

ND_0082387 ("Student Assets," University of Notre Dame, 2022/2023).

ND_0082428 ("Home Equity," University of Notre Dame, 2022/2023).

ND_0141409 ("NCPC Need Analysis Methodology," University of Notre Dame, February 16, 2006).

ND_0141410 ("IM Increases to Income and Professional Judgment Offsets," University of Notre Dame, March 13, 2006).

ND_0141423 ("NCPC Need Analysis Methodology," University of Notre Dame, January 24, 2007).

ND_0141431 ("NCPC Need Analysis Methodology," University of Notre Dame, December 5, 2007).

ND_0141445 ("NCPC Need Analysis Methodology," University of Notre Dame, February 24, 2009).

ND_0141571 ("NCPC Need Analysis Methodology," University of Notre Dame, February 1, 2010).

ND_0141706 ("Non-Custodial Parent Need Analysis," University of Notre Dame).

ND_0142483 ("Institutional Methodology," University of Notre Dame, 2003/2004).

ND_0148825 ("Financial Aid: 2017/2018 Need Analysis Manual," University of Notre Dame, December 12, 2016).

ND_0148882 ("Financial Aid: 2014/2015 Need Analysis Manual," University of Notre Dame, January 27, 2014).

ND_0148907 ("Financial Aid: 2015/2016 Need Analysis Manual," University of Notre Dame, February 9, 2015).

ND_0149755 ("Financial Aid: 2010/2011 Need Analysis Manual," University of Notre Dame, 2010/2011).

ND_0150901 ("IM Increases to Income and Professional Judgment Offsets: Institutional Methodology Increases to Income," University of Notre Dame, January 18, 2007).

ND_0151086 ("Institutional Methodology," University of Notre Dame, 2008).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

ND_0151093 ("IM Increases to Income and Professional Judgment Offsets," University of Notre Dame, January 24, 2008).

ND_0151193 ("NCPC Need Analysis Philosophy & Guidelines," University of Notre Dame, 2009).

ND_0151195 ("Institutional Methodology," University of Notre Dame, January 20, 2009).

ND_0151202 ("IM Increases to Income and Professional Judgment Offsets," University of Notre Dame, February 24, 2009).

ND_0151285 ("NCPC Need Analysis Philosophy & Guidelines," University of Notre Dame, 2010).

ND_0151287 ("Institutional Methodology," University of Notre Dame, May 25, 2010).

ND_0152616 ("Financial Aid: 2016/2017 Need Analysis Manual," University of Notre Dame, February 16, 2016).

ND_0152928 ("Financial Aid: 2015/2016 Need Analysis Manual," University of Notre Dame, February 9, 2015).

ND_0158341 ("Email with subject line 'RE: Draft Strategic Plan'," October 7, 2013).

ND_0164562 ("Need Analysis Manual," University of Notre Dame, 2022/2023).

ND_0164575 ("Need Analysis Manual," University of Notre Dame, 2021/2022).

ND_0165731 ("Imputing Assets," University of Notre Dame, 2021/2022).

ND_0165945 ("Professional Judgment Income Offsets for Use in Institutional Methodology," University of Notre Dame, 2008/2009).

ND_0165954 ("Institutional Methodology Increases to Income," University of Notre Dame, 2008).

ND_0166308 ("Medical/Dental Expenses," University of Notre Dame, 2022/2023).

ND_0166311 ("Imputing Assets," University of Notre Dame, 2022/2023).

ND_0168313 ("Need Analysis & Professional Judgment," University of Notre Dame, 2017/2018).

ND_0191265 ("Institutional Methodology," University of Notre Dame, 2005).

ND_0191283 ("Institutional Methodology," University of Notre Dame, 2004).

ND_0191290 ("Institutional Methodology," University of Notre Dame, 2003/2004).

ND_0191421 ("Institutional Methodology," University of Notre Dame, April 3, 2006).

ND_0191476 ("Institutional Methodology," University of Notre Dame, 2007).

ND_0191700 ("Financial Aid: 08/09 Need Analysis," University of Notre Dame, 2008-2009).

ND_0197942 ("3. Expenses," University of Notre Dame, 2018/2019).

ND_0201538 ("Tuition Expenses," University of Notre Dame, 2018/2019).

ND_0201559 ("Noncustodial Parent Need Analysis Manual," University of Notre Dame, 2017/2018).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

ND_0201568 ("Loss of Income/Future Year Income," University of Notre Dame, 2018/2019).

ND_0201634 ("Cost of Living (COLA)," University of Notre Dame, 2022/2023).

ND_0201722 ("Cost of Living (COLA)," University of Notre Dame, 2020/2021).

ND_0217965 ("Financial Aid: 2014/2015 Need Analysis Manual," University of Notre Dame, January 27, 2014).

ND_0223401 ("1. Biographic Data," University of Notre Dame, 2019/2020).

ND_0223541 ("One-Time Income/Distribution," University of Notre Dame, 2020/2021).

ND_0223548 ("Noncustodial Parent Need Analysis Manual," University of Notre Dame, 2020/2021).

ND_0223556 ("Medical/Dental Expenses," University of Notre Dame, 2020/2021).

ND_0223581 ("Imputing Assets," University of Notre Dame, 2020/2021).

ND_0223600 ("Childcare," University of Notre Dame, 2020/2021).

ND_0223619 ("1. Biographic Data," University of Notre Dame, 2020/2021).

ND_0223624 ("2. Income and Benefits," University of Notre Dame, 2020/2021).

ND_0223636 ("Tuition Expenses," University of Notre Dame, 2019/2020).

ND_0223672 ("Rental Properties - Schedule E, Part I," University of Notre Dame, 2019/2020).

ND_0223678 ("Parent Educational Loan Debt," University of Notre Dame, 2019/2020).

ND_0223710 ("Imputing Assets," University of Notre Dame, 2019/2020).

ND_0223926 ("Student Assets," University of Notre Dame, 2021/2022).

ND_0223975 ("Medical/Dental Expenses," University of Notre Dame, 2021/2022).

ND_0224001 ("Eldercare," University of Notre Dame, 2021/2022).

ND_0224033 ("1. Biographic Data," University of Notre Dame, 2021/2022).

ND_0224535 ("Business Income and Loss (Partnership, S-Corporation, Corporation)," University of Notre Dame, 2021/2022).

ND_0224812 ("Childcare," University of Notre Dame, 2021/2022).

ND_0225203 ("Tuition Expenses," University of Notre Dame, 2022/2023).

ND_0225319 ("Eldercare," University of Notre Dame, 2022/2023).

ND_0225341 ("Childcare," University of Notre Dame, 2022/2023).

ND_0225346 ("Business Income and Loss (Partnership, S-Corporation, Corporation)," University of Notre Dame, 2022/2023).

ND_0225365 ("2. Income and Benefits," University of Notre Dame, 2022/2023).

ND_0261298 ("Cost of Living (COLA)," University of Notre Dame, 2021/2022).

ND_0261383 ("Business Asset Treatment," University of Notre Dame, 2018/2019).

ND_0261575 ("Retirement Savings Allowance (RSA)," University of Notre Dame, 2021/2022).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

ND_0261582 ("Rental Properties - Schedule E, Part I," University of Notre Dame, 2021/2022).
ND_0264614 ("Rental Properties - Schedule E, Part I," University of Notre Dame, 2020/2021).
ND_0305009 ("Retirement Savings Allowance (RSA)," University of Notre Dame, 2022/2023).
ND_0305014 ("Rental Properties - Schedule E, Part I," University of Notre Dame, 2022/2023).
ND_0321623 ("Financial Aid: 2006/2007 Need Analysis Manual," University of Notre Dame, 2006/2007).
ND_0321797 ("Financial Aid: 2011/2012 Need Analysis Manual," University of Notre Dame, February 17, 2011).
ND_0321852 ("Financial Aid: 2013/2014 Need Analysis Manual," University of Notre Dame, 2013/2014).
ND_0321923 ("Financial Aid: 2012/2013 Need Analysis Manual," University of Notre Dame, 2012/2013).
ND_0325577 ("Income Increases/Offsets," University of Notre Dame, 2005).
ND_0325674 ("Income Increases/Offsets," University of Notre Dame, 2004).
ND_0326538 ("IM Increases to Income and Professional Judgment Offsets," University of Notre Dame, February 26, 2010).
ND_0328925 ("Noncustodial Parent Need Analysis Manual," University of Notre Dame, 2018/2019).
ND_0329369 ("2018/2019 Policy and Procedural Manual: Rental Properties - Schedule E, Part I," University of Notre Dame Office of Student Financial Services).
ND_0329399 ("2018/2019 Policy and Procedural Manual: Medical/Dental Expenses," University of Notre Dame Office of Student Financial Services).
ND_0329450 ("Cost of Living (COLA)," University of Notre Dame, 2018/2019).
ND_0329458 ("Business Income and Loss (Partnership, S-Corporation, Corporation)," University of Notre Dame, 2018/2019).
ND_0329638 ("Retirement Assets," University of Notre Dame, 2020/2021).
NULIT-0000000094 ("Institutional Methodology Tables and Worksheets: 2021-22 School Year," CollegeBoard, June 30, 2020).
NULIT-0000000233 ("Packaging Philosophy 2022-23," Northwestern University).
NULIT-0000000240 ("2022-23 School Service Options - Northwestern University," CollegeBoard, March 16, 2022).
NULIT-0000000348 ("568 Presidents' Group: Consensus Methodology Policy Guidelines," 568 Presidents' Group, 2016).
NULIT-0000000540 ("Freshmen Packaging Guidelines & Procedures 2017-18," Northwestern University Office of Undergraduate Financial Aid, December 2018).
NULIT-0000000613 ("School Service Options 2018-20," Northwestern University, 2018-2020).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

NULIT-0000000631 ("School Service Options 2020-21," Northwestern University).

NULIT-0000000649 ("Institutional Methodology Tables and Worksheets: 2019-20 School Year," CollegeBoard, December 4, 2018).

NULIT-0000000665 ("Institutional Methodology Tables and Worksheets: 2022-23 School Year," CollegeBoard, August 1, 2021).

NULIT-0000000680 ("Institutional Methodology User Guide," Northwestern University, July 15, 2021).

NULIT-0000000807 ("School Service Options 2021-22," Northwestern University).

NULIT-0000018769 ("568 Presidents' Group: Professional Judgment Guidelines Manual," 568 Presidents' Group, 2016).

NULIT-0000038124 ("Consensus Methodology Policy Guidelines," 568 Presidents Group, November 2015).

NULIT-0000072193 ("Draft Professional Judgment Guidelines Manual," 568 Presidents' Group, August 26, 2015).

NULIT-0000111384 ("Institutional Methodology Tables and Worksheets: 2017-18 School Year," CollegeBoard, June 27, 2016).

NULIT-0000161662 ("Consensus Methodology Policy Guidelines Manual," The 568 Presidents' Group, 2004).

NULIT-0000162050 ("2018-19 School Service Options - Northwestern University," CollegeBoard, August 24, 2018).

NULIT-0000162068 ("Service Options Confirmation 2016," Northwestern University, 2016).

NULIT-0000162117 ("Service Options Confirmation 2015," Northwestern University, 2015).

NULIT-0000166453 ("Institutional Methodology Tables and Worksheets: 2018-19 School Year," CollegeBoard, July 26, 2017).

NULIT-0000181680 ("Institutional Methodology User Guide," CollegeBoard, July 15, 2022).

PENN568-LIT-00000599 ("Need Analysis," University of Pennsylvania, 2012-2013).

PENN568-LIT-00000706 ("Need Analysis," University of Pennsylvania, 2012-2013).

PENN568-LIT-00032373 ("College Board's Student Search Letter," University of Pennsylvania, February 2008).

PENN568-LIT-00055002 ("Email with subject line 'Penn IM Tool update'," May 10, 2021).

PENN568-LIT-00143952 ("ASQ Briefing," University of Pennsylvania, 2021).

PENN568-LIT-00162887 ("The 568 Presidents' Group Consensus Methodology Policy Guidelines," The 568 Presidents' Group, December 2016).

PENN568-LIT-00163047 ("Need Analysis," University of Pennsylvania, 2005).

PENN568-LIT-00168774 ("2003-2004 Need Analysis Guidelines," University of Pennsylvania, February 10, 2023).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

PENN568-LIT-00168777 ("Guidelines for EDP Class of 2011 - 2007B Aid Year," University of Pennsylvania, 2006).

PENN568-LIT-00168783 ("2008-2009 Freshman & Transfer Need Analysis Guidelines for 2008B Aid Year Class of 2012," University of Pennsylvania).

PENN568-LIT-00168797 ("Tables & Changes to Need Analysis for 2004-05 EDP, Class of 2008," University of Pennsylvania, 2004-2005).

PENN568-LIT-00168802 ("Undergraduate Need Analysis Application Calcs & Tables by Version 2006-2007," University of Pennsylvania, 2006-2007).

PENN568-LIT-00168826 ("SRFS: Need Analysis for 2013-14," University of Pennsylvania, 2013-2014).

RICE_LIT0000007065 ("The 568 Presidents' Group Consensus Methodology Policy Guidelines," Rice University, 2015).

RICE_LIT0000024420 ("Email with subject line 'Competitive Statistics and Charts'," April 12, 2018).

RICE_LIT0000026732 ("Rice Enrollment Strategy Project Steering Committee Review," Rice University, May 14, 2018).

RICE_LIT0000027138 ("COFHE Yellowbook for 2010-2011," Consortium on Financing Higher Education, 2010-2011).

RICE_LIT0000027141 ("COFHE Yellowbook for 2013-2014," Consortium on Financing Higher Education, 2013-2014).

RICE_LIT0000069555 ("Rice Enrollment Strategy Project Steering Committee Review," Rice University, December 11, 2017).

RICE_LIT0000149839 ("Tuition, Fees, Room, and Board," Rice University, 2010-2016).

RICE_LIT0000175649 ("William Marsh Rice University - Global Banner Options," Rice University).

STANFORD_000847 ("Email with subject line 'RE: 568 Fall Mtgs'," October 8, 2020).

UCHICAGO_0000000046 ("Early Action Need Analysis, 2013-14," University of Chicago, November 30, 2012).

UCHICAGO_0000000245 ("Early Action Need Analysis, 2012-13," University of Chicago, December 2, 2011).

UCHICAGO_0000031344 ("Early Action Need Analysis, 2003-04," University of Chicago, December 3, 2002).

UCHICAGO_0000031355 ("Early Action Need Analysis, 2011-12," University of Chicago, November 29, 2010).

UCHICAGO_0000031368 ("Early Action Need Analysis, 2010-11," University of Chicago, December 4, 2009).

UCHICAGO_0000031381 ("Early Action Need Analysis, 2009-10," University of Chicago, November 13, 2008).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

UCHICAGO_0000031395 ("Early Action Need Analysis, 2005-06," University of Chicago, November 30, 2004).

UCHICAGO_0000031407 ("Early Action Need Analysis, 2007-08," University of Chicago, December 3, 2006).

UCHICAGO_0000031427 ("Early Action Need Analysis, 2006-07," University of Chicago, December 2, 2005).

UCHICAGO_0000148255 ("Frosh Need Analysis, 2008-09," University of Chicago, February 19, 2008).

UCHICAGO_0000148351 ("Early Action Need Analysis, 2004-05," University of Chicago, December 9, 2003).

UCHICAGO_0000167527 ("University of Chicago Undergraduate Admissions Recruitment Review," University of Chicago, June 15, 2012).

UCHICAGO_0000183658 ("Email with subject line 'Report of the 568 Presidents Group'," July 3, 2001).

UCHICAGO_0000183661 ("Report of The Common Standards Subcommittee to The 568 Presidents' Working Group," 568 Presidents' Working Group, June 1, 2001).

UCHICAGO_0000183864 ("568 Presidents' Group Financial Aid Questionnaire - University of Chicago 2003/04 - 2005/06," United States Government Accountability Office, 2005).

UCHICAGO_0000227636 ("Frosh Appeals," University of Chicago, April 2016).

USNWR0000000460 ("Best Colleges," U.S. News & World Report, 2014).

UVA_0000126 ("Undergraduate Newly Admitted Students Survey: Overall Frequencies," University of Virginia Office of Institutional Assessment and Studies, January 1, 2010).

UVA_0000153 ("Undergraduate Admissions Turndowns Survey: Overall Frequencies," University of Virginia Office of Institutional Assessment and Studies, 2010).

UVA_0000329 ("Newly Admitted Student Survey: Means and Frequencies," University of Virginia Office of Institutional Assessment and Studies, January 1, 2011).

UVA_0000376 ("Undergraduate Admissions Turndowns Survey: Overall Frequencies," University of Virginia, January 1, 2008).

VANDERBILT-00000215 ("Awarding Guidelines for Freshman and Transfers, Academic Year 2015-2016," Vanderbilt University, 2015-2016).

VANDERBILT-00000222 ("Awarding Guidelines for Freshman and Transfers, Academic Year 2016-2017," Vanderbilt University, 2016-2017).

VANDERBILT-00000227 ("Awarding Guidelines for Freshman, Transfers, and Upperclassmen, Academic Year 2017-2018," Vanderbilt University, 2017-2018).

VANDERBILT-00000232 ("Awarding Guidelines for Freshman, Transfers, and Upperclassmen, Academic Year 2018-2019," Vanderbilt University, 2018-2019).

VANDERBILT-00000244 ("Awarding Guidelines for Freshman, Transfers, and Upperclassmen, Academic Year 2019-2020," Vanderbilt University, 2019-2020).

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

VANDERBILT-00029603 (“Vanderbilt University Professional Judgment Guidelines,” Vanderbilt University, February 2016).

VANDERBILT-00191356 (“CSS Profile Question,” Vanderbilt University, January 3, 2014).

VANDERBILT-00200181 (“Awarding Guidelines for Freshman, Academic Year 2003-2004,” Vanderbilt University, February 10, 2003).

VANDERBILT-00201043 (“Awarding Guidelines for Freshman, Academic Year 2004-2005,” Vanderbilt University, 2004-2005).

VANDERBILT-00201907 (“Awarding Guidelines for Freshman, Academic Year 2005-2006,” Vanderbilt University, 2005-2006).

VANDERBILT-00203268 (“Awarding Guidelines for Freshman, Academic Year 2006-2007,” Vanderbilt University, 2006-2007).

VANDERBILT-00205140 (“Awarding Guidelines for Freshman, Academic Year 2007-2008,” Vanderbilt University, 2007-2008).

VANDERBILT-00206204 (“Awarding Guidelines for Freshman, Academic Year 2008-2009,” Vanderbilt University, 2008-2009).

VANDERBILT-00207496 (“Awarding Guidelines for Freshman and Transfers, Academic Year 2009-2010,” Vanderbilt University, 2009-2010).

VANDERBILT-00209090 (“Awarding Guidelines for Freshman and Transfers, Academic Year 2010-2011,” Vanderbilt University, 2010-2011).

VANDERBILT-00212167 (“Awarding Guidelines for Freshman and Transfers, Academic Year 2011-2012,” Vanderbilt University, 2011-2012).

VANDERBILT-00216285 (“Awarding Guidelines for Freshman and Transfers, Academic Year 2012-2013,” Vanderbilt University, 2012-2013).

VANDERBILT-00218882 (“CollegeBoard Financial Aid Services: Service Options Confirmation,” Vanderbilt University, August 2, 2011).

VANDERBILT-00272944 (“Profile Users Guide,” CollegeBoard, October 2013).

VANDERBILT-00332045 (“Financial Aid: Exchange Administrative Group,” Vanderbilt University, January 23, 2019).

YALE_LIT_0000248782 (“568 Presidents’ Group Financial Aid Questionnaire: Yale,” United States Government Accountability Office).

Legislative Documents

Advisory Committee on Student Financial Assistance, 20 U.S.C. § 1098 (2001).

House Conference Report No. 103-761 (1994).

Improving America’s Schools Act of 1994, § 568, 15 U.S.C. § 1.

Need-Based Educational Aid Act of 2015, H. R. Rep. No. 114-224.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Academic Literature

- Anderson, Drew M., et al., "The State of Financial Knowledge in College: New Evidence from a National Survey," *RAND Corporation*, 2018.
- Avery, Christopher, et al., "Digital Messaging to Improve College Enrollment and Success," *Economics of Education Review*, Vol. 84, 2021.
- Avery, Christopher, et al., "A Revealed Preference Ranking of U.S. Colleges and Universities," *The Quarterly Journal of Economics*, Vol. 128, No. 1, 2013.
- Avery, Christopher, et al., "Cost Should Be No Barrier: An Evaluation of the First Year of Harvard's Financial Aid Initiative," *National Bureau of Economic Research Working Paper Series*, 2006.
- Baum, Sandy and Marie O'Malley, "College on Credit: How Borrowers Perceive Their Education Debt," *Journal of Student Financial Aid*, Vol. 33, No. 3, 2003.
- Bennett, Christopher "Taken for Granted? Effects of Loan-Reduction Initiatives on Student Borrowing, Admission Metrics, and Campus Diversity," *Research in Higher Education*, 2020.
- Bettinger, Eric P., et al., "The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment," *The Quarterly Journal of Economics*, Vol. 127, No. 3, 2012.
- Blume, Marshall, "Endowment Spending in Volatile Markets: What Should Fiduciaries Do?," *Review of Quantitative Finance and Accounting*, Vol. 35, 2010.
- Bound, John, et al., "Playing the Admissions Game: Student Reactions to Increasing College Competition," *Journal of Economic Perspectives*, Vol. 23, No. 4, 2009.
- Bowen, William G. and Derek Bok, *The Shape of the River*, 1 Ed., Princeton University Press, 1998.
- Brealey, Richard, et al., *Principles of Corporate Finance*, 13 Ed., New York, New York, McGraw-Hill Education, 2020.
- Brown, Keith, et al., "The Troves of Academe: Asset Allocation, Risk Budgeting, and the Investment Performance of University Endowment Funds," *McCombs Research Paper Series*, 2008.
- Calabrese, Thad D. and Todd L. Ely, "Understanding and Measuring Endowment in Public Charities," *Nonprofit and Voluntary Sector Quarterly*, Vol. 46, No. 4, 2017.
- Cellini, Stephanie, "For-Profit Colleges in the United States: Insights from Two Decades of Research," in *The Routledge Handbook of the Economics of Education*, 1 Ed., Routledge, 2022.
- Cellini, Stephanie and Claudia Goldin, "Does Federal Student Aid Raise Tuition? New Evidence on For Profit Colleges," *American Economic Journal: Economic Policy*, Vol. 6, No. 4, November 2014.
- Cellini, Stephanie and Nicholas Turner, "Gainfully Employed? Assessing the Employment and Earnings of For-Profit College Students Using Administrative Data," *The Journal of Human Resources*, Vol. 52, No. 2, 2018.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Cheslock, John and Sam Riggs, "Ever-Increasing Listed Tuition and Institutional Aid: The Role of Net Price Differentials by Year of Study," *Educational Evaluation and Policy Analysis*, 2023.
- Clotfelter, Charles T., "Financial Aid and Public Policy," in *Economic Challenges in Higher Education*, University of Chicago Press, 1991.
- Darolia, Rajeev, "Messengers of Bad News or Bad Apples? Student Debt and College Accountability," *Association for Education Finance and Policy*, 2015.
- Dooley, Kevin, "Organizational Complexity," *International Encyclopedia of Business and Management*, 2002.
- Dynarski, Susan, "Hope for Whom? Financial Aid for the Middle Class and Its Impact on College Attendance," *National Tax Journal*, Vol. 53, No. 3.2, 2000.
- Dynarski, Susan, et al., "Chapter 4 - College Costs, Financial Aid, and Student Decisions," Vol. 7, *Handbook of the Economics of Education*, 2023.
- Fishman, James, "What Went Wrong: Prudent Management of Endowment Funds and Imprudent Endowment Investing Policies," *Journal of College and University Law*, 2014.
- Fuller, Matthew B., "A History of Financial Aid to Students," *Journal of Student Financial Aid*, Vol. 44, No. 1, July 25, 2014.
- Gibson, Annetta, "Budgeting in Higher Education," *School of Business Faculty Publications*, January 2009.
- Hossler, Don and Karen Gallagher, "Studying Student College Choice: A Three-Phase Model and the Implications for Policymakers," *The Journal of the American Association of Collegiate Registrars and Admissions Officers*, January 1987.
- Hoxby, Caroline M. and Christopher Avery, "The Missing 'One-Offs': The Hidden Supply of High-Achieving, Low Income Students," *The Brookings Institution*, Vol. 44, No. 1, 2013.
- Kelly, Robert N., "The New Delivery System: A Voice for Caution," Vol. 7, No. 1, 1977.
- Kremer, Levy, "Peer Effects and Alcohol Use Among College Students," *Journal of Economic Perspectives*, Vol. 22, No. 3, 2008.
- Long, Bridget T., "Making College Affordable by Improving Aid Policy," *Issues in Science and Technology*, Vol. 26, 2010.
- Long, Bridget T., "The New Financial Aid Policies: Their Impact on Access and Equity For Low-Income Students?," *Harvard Graduate School of Education*, 2010.
- Long, Bridget T., "The New Financial Aid Policies: Their Impact on Access and Equity for Low-Income Students?," in *Diversity in American Higher Education: Toward a More Comprehensive Approach*, Routledge, 2011, edited by Stulberg, Lisa M. and Sharon L. Weinberg.
- Long, Bridget T. and Erin Riley, "Financial Aid: A Broken Bridge to College Access?," *Harvard Educational Review*, Vol. 77, No. 1, 2007.
- Markle, Gail, "Crushing Debt or Savvy Strategy? Financial Literacy and Student Perceptions of their Student Loan Debt," *Journal of Student Financial Aid*, Vol. 49, No. 1, 2019.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- McPherson, Michael S. and Morton O. Schapiro, "Financing Undergraduate Education: Designing National Policies," *National Tax Journal*, Vol. 50, No. 3, 1997.
- McPherson, Michael S. and Morton O. Schapiro, *The Student Aid Game: Meeting Need and Rewarding Talent in American Higher Education*, Ewing, New Jersey, Princeton University Press, 1998.
- Nguyen, Tuan, et al., "The Effects of Grant Aid on Student Persistence and Degree Attainment: A Systematic Review and Meta-Analysis of the Causal Evidence," *Review of Educational Research*, Vol. 89, No. 6, 2019.
- Rose, David and Robert Sorensen, "High Tuition, Financial Aid, and Cross-Subsidization: Do Needy Students Really Benefit?," *Southern Economic Association*, Vol. 59, 1992.
- Roth, Andrew, "Admission, Ethics & Financial Aid: Formulating and Applying an Ethical Framework to the Need-Blind Debate," in *The Journal of College Admission Ethics Series*, Alexandria, Virginia, National Association for College Admission Counseling, 2000, edited by Loveland, Elaina C. and Joyce Raynor.
- Sacerdote, Bruce, "Chapter 4 - Peer Effects in Education: How Might They Work, How Big Are They and How Much Do We Know Thus Far?," *Handbook of the Economics of Education*, Vol. 3, 2011.
- Sacerdote, Bruce, "Peer Effects with Random Assignment: Results for Dartmouth Roommates," *The Quarterly Journal of Economics*, Vol. 116, No. 2, May 2001.
- Winston, Gordon, "Why Can't a College Be More Like a Firm," *Change: The Magazine of Higher Learning*, 1997.
- Winston, Gordon C., "Subsidies, Hierarchy and Peers: The Awkward Economics of Higher Education," *Journal of Economic Perspectives*, Vol. 13, No. 1, 1999.

Public Data

- National Center for Education Statistics, *Acceptance rates; number of applications, admissions, and enrollees; and enrollees' SAT and ACT scores for degree-granting postsecondary institutions with first-year undergraduates, by control and level of institution: Academic year 2022-23*, https://nces.ed.gov/programs/digest/d23/tables/dt23_305.40.asp.
- The National Association of College and University Business Officers, *Fiscal Year (FY) 2023 Endowment Market Value of U.S. and Canadian Higher Education Institutions and Affiliated Foundations That Participated in the 2023 NACUBO-Commonfund Study of Endowments, and Change in Endowment Market Value from FY22 to FY23*, 2023, <https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fedge.sitecorecloud.io%2Fnacubo1-nacubo-prd-dc8b%2Fmedia%2FNacubo%2FDocuments%2FEndowmentFiles%2F2023-NCSE-Endowment-Market-Values-FINAL.xlsx&wdOrigin=BROWSELINK>.
- National Center for Education Statistics, *Integrated Postsecondary Education Data System*, <https://nces.ed.gov/ipeds/datacenter>.
- National Center for Education Statistics, *Median annual earnings of full-time year-round workers 25 to 34 years old and full-time year-round workers as a percentage of the labor force, by*

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

sex, race/ethnicity, and educational attainment, 2020,
https://nces.ed.gov/programs/digest/d21/tables/dt21_502.30.asp.

Public Webpages and Reports

“The 25 Best Drama Schools for an Acting Degree,” The Hollywood Reporter, May 26, 2017, available at <https://www.hollywoodreporter.com/lists/25-best-drama-schools-an-acting-degree-1007229/>, accessed July 24, 2024.

“568 Presidents Group Member Institutions,” 568 Presidents Group, January 24, 2022, available at <https://web.archive.org/web/20220124014615/http://www.568group.org/home/?q=node/24>, accessed July 25, 2024.

“568 Presidents Group Member Institutions,” January 24, 2022, available at <https://web.archive.org/web/20220124040052/http://www.568group.org/home/?q=node/24>, accessed July 6, 2024.

“2019 Annual Report,” American Red Cross, 2019, available at <https://www.redcross.org/content/dam/redcross/about-us/publications/2019-publications/Annual-Report-2019.pdf>, accessed August 4, 2024.

“2021 Income Tax Return,” Smithsonian Institution, available at <https://www.si.edu/sites/default/files/about/2021-smithsonian-form-990.pdf>, accessed July 7, 2024.

“2022 Endowment Report,” California Institute of Technology, 2022, available at https://investments.caltech.edu/documents/25428/Caltech_Endowment_Brochure_FY22_SinglePages_1IIXa3c.pdf, accessed July 28, 2024.

“2022 State of the University Address by President Martha E. Pollack,” Cornell University, March 26, 2022, available at <https://president.cornell.edu/speeches-writings/2022-state-of-the-university-address/>, accessed July 23, 2024.

“2023 Annual Impact Report,” Francis Ouimet Scholarship Fund, 2023, available at <https://www.ouimet.org/2022-annual-impact-report/>, accessed August 2, 2024.

“2023 Impact Report,” Beek Center for Social Impact, 2023, available at <https://beekcenter.georgetown.edu/wp-content/uploads/2024/03/Beek-2023-Impact-Report.pdf>, accessed July 23, 2024.

“2023 National University Rankings,” Washington Monthly, available at <https://washingtonmonthly.com/2023-college-guide/national-1/>, accessed July 26, 2024.

“2024-25 Participating Institutions and Programs,” CollegeBoard, available at <https://profile.collegeboard.org/profile/ppi/participatingInstitutions.aspx>, accessed December 8, 2023.

“2024 Best Colleges for Performing Arts in America,” NICHE, 2024, available at <https://www.niche.com/colleges/search/best-colleges-for-theater/>, accessed July 10, 2024.

“2024 Best Colleges in the U.S.,” Wall Street Journal, 2024, available at <https://www.wsj.com/rankings/college-rankings/best-colleges-2024>, accessed July 16, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- “About,” Center for Social Concerns, available at <https://socialconcerns.nd.edu/about/>, accessed August 3, 2024.
- “About Cornell Cooperative Extension,” Cornell University, available at <https://cals.cornell.edu/cornell-cooperative-extension/about-cornell-cooperative-extension>, accessed July 6, 2024.
- “About ED,” U.S. Department of Education, available at <https://www2.ed.gov/about/landing.jhtml>, accessed July 25, 2024.
- “About IPEDS,” Integrated Postsecondary Education Data System, available at <https://nces.ed.gov/ipeds/about-ipeds>, accessed August 1, 2024.
- “About Penn First Plus,” University of Pennsylvania, available at <https://pennfirstplus.upenn.edu/about-penn-first-plus/>, accessed July 8, 2024.
- “About the College,” Carnegie Mellon University, available at <https://engineering.cmu.edu/about-us/>, accessed August 4, 2024.
- “About the College House System at Penn,” University of Pennsylvania, available at <https://www.collegehouses.upenn.edu/about>, accessed July 6, 2024.
- “About Tisch,” NYU | Tisch, available at <https://tisch.nyu.edu/about/about-tisch>, accessed August 4, 2024.
- “About Us,” CollegeBoard, available at <https://about.collegeboard.org/>, accessed August 25, 2023.
- “Academic Life,” Georgetown University, available at <https://www.georgetown.edu/academics/>, accessed August 7, 2024.
- “Academics,” Rice University, available at <https://admission.rice.edu/academics>, accessed July 24, 2024.
- “Admissions Dean Eric Furda,” University of Pennsylvania Almanac, October 28, 2008, available at https://almanac.upenn.edu/archive/volumes/v55/n10/council_ef.html, accessed August 1, 2024.
- “Admitted Student FAQs,” Northwestern University, available at <https://undergradaid.northwestern.edu/apply-for-aid/prospective-students/admitted-student-faqs.html>, accessed August 5, 2024.
- “Admitted Student Questionnaire PLUS™ User Guide 2013-2015,” CollegeBoard, available at <https://secure-media.collegeboard.org/digitalServices/pdf/professionals/admitted-student-questionnaire-plus-user-guide.pdf>, accessed July 28, 2024.
- “Apply for TAFDC,” Mass.gov, available at <https://www.mass.gov/how-to/apply-for-tafdc>, accessed July 26, 2024.
- “Applying for Financial Aid,” University of Southern California, available at <https://financialaid.usc.edu/graduates/prospective/applying.html>, accessed August 7, 2024.
- “Associations Code (15 PA.C.S.) and Probate, Estates and Fiduciaries Code,” 141, ed. Assembly, Pennsylvania General (1998), accessed September 22, 2023.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- “An Assortment of Acronyms and Abbreviations at Penn,” University of Pennsylvania Almanac, November 24, 2015, available at <https://almanac.upenn.edu/articles/an-assortment-of-acronyms-and-abbreviations-at-penn>, accessed August 3, 2024.
- “Athletics Compliance Office,” University of Notre Dame Department of Athletics, available at <https://financialaid.nd.edu/aid-types/undergraduate-students/merit-based-scholarships/> accessed June 27, 2024.
- “Athletics for All,” University of Chicago, available at <https://collegeadmissions.uchicago.edu/campus-life/athletics>, accessed August 3, 2024.
- “The Basilica of the Sacred Heart,” University of Notre Dame, available at <https://basilica.nd.edu/about/>, accessed July 23, 2024.
- “Become a BC Nurse,” Boston College Connell School of Nursing, available at <https://www.bc.edu/bc-web/schools/cson.html>, accessed July 10, 2024.
- “Best Division 1 Football Colleges,” NCSA College Recruiting, available at <https://www.ncsasports.org/best-colleges/best-division-1-football-colleges>, accessed August 4, 2024.
- “Best Hockey Colleges,” NCSA College Recruiting, available at <https://www.ncsasports.org/best-colleges/best-ice-hockey-colleges>, accessed August 4, 2024.
- “Best, Brightest and Rejected: Elite Colleges Turn Away Up to 95%,” The New York Times, available at <https://www.nytimes.com/2014/04/09/us/led-by-stanfords-5-top-colleges-acceptance-rates-hit-new-lows.html>, accessed July 6, 2024.
- “Bill & Melinda Gates Foundation Consolidated Financial Statements December 31, 2023 and 2022,” KPMG, May 23, 2024, available at <https://www.gatesfoundation.org/about/financials>, accessed August 2, 2024.
- “Bill & Melinda Gates Foundation Trust Financial Statements December 31, 2023 and 2022,” KPMG, May 22, 2024, available at <https://www.gatesfoundation.org/about/financials>, accessed August 2, 2024.
- “Biographies of Senior Officials - U.S. Department of Education,” U.S. Department of Education, available at <https://www2.ed.gov/news/staff/bios/index.html>, accessed August 1, 2024.
- “Bloomberg’s Record Gift Helps Johns Hopkins Realize Key Goal of Need-Blind Admissions,” Johns Hopkins University, 2018, available at <https://hub.jhu.edu/2018/11/26/michael-bloomberg-historic-donation-johns-hopkins/>, accessed April 29, 2024.
- “A Brief Summary and Analysis of Section 568,” 568 Presidents Group, January 24, 2022, available at <https://web.archive.org/web/20220124040057/http://www.568group.org/home/?q=node/12>, accessed August 25, 2023.
- “Brown Partners with KIPP,” News from Brown, November 13, 2012, available at <https://news.brown.edu/articles/2012/11/brown-partners-kipp>, accessed March 4, 2024.
- “Brown University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- “California Institute of Technology Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.
- “California Institute of Technology Financial Statements for the Years Ended September 30, 2023 and 2022,” PricewaterhouseCoopers, January 24, 2024, available at <https://finance.caltech.edu/Resources/financials>, accessed June 5, 2024.
- “Caroline Hill Scholarship Fund,” Carlisle High School, 2017, available at <https://www.carlislema.gov/DocumentCenter/View/46/Caroline-Hill-Scholarship-Fund-for-Carlisle-High-School-Students-Application-2017-PDF>, accessed August 2, 2024.
- “Chapter 3: Expected Family Contribution (EFC),” Federal Student Aid, available at <https://fsapartners.ed.gov/knowledge-center/fsa-handbook/2023-2024/application-and-verification-guide/ch3-expected-family-contribution-efc>, accessed December 11, 2023.
- “Collection Development,” Cornell University, available at <https://www.library.cornell.edu/collections/collection-development/>, accessed July 6, 2024.
- “Collections,” Cornell University, available at <https://www.library.cornell.edu/collections/>, accessed July 6, 2024.
- “College Achievement Program,” University of Pennsylvania, available at <https://pennfirstplus.upenn.edu/college-achievement-program/>, accessed July 7, 2024.
- “College Partners,” QuestBridge, available at <https://www.questbridge.org/college-partners>, accessed August 6, 2024.
- “Columbia College Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.
- “Columbia General Studies Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.
- “Congress Passes Bill Allowing Universities to Collaborate on Financial Aid Best Practices,” Chuck Grassley, July 29, 2015, available at <https://www.grassley.senate.gov/news/news-releases/congress-passes-bill-allowing-universities-collaborate-financial-aid-best>, accessed July 25, 2024.
- “Consortium on Financing Higher Education,” Consortium on Financing Higher Education, available at <https://web.mit.edu/cofhe/>, accessed December 7, 2023.
- “Consumer Price Index for All Urban Consumers: All Items in U.S. City Average,” Federal Reserve Bank of St. Louis, June 2024, available at <https://fred.stlouisfed.org/series/CPIAUCNS>, accessed August 7, 2024.
- “Cornell Drops Need-Based Loans for Students From Families Earning Under \$75,000,” Cornell University, January 31, 2008, available at <https://news.cornell.edu/stories/2008/01/cornell-announces-sweeping-new-financial-aid-program>, accessed August 6, 2024.
- “Cornell University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- “Cornell University Common Dataset,” Common Dataset Initiative, 2022-2023, available at https://irp.dpb.cornell.edu/wp-content/uploads/2023/03/CDS_2022-2023_Cornell-University-v5.pdf, accessed July 25, 2024.
- “Cornell University Consolidated Financial Statements June 30, 2022 and 2021,” PricewaterhouseCoopers, October 17, 2022, available at <https://finance.cornell.edu/controller/reporting>, accessed December 11, 2023.
- “Cost of Living Data Series,” Missouri Economic Research and Information Center, 2024, available at <https://meric.mo.gov/data/cost-living-data-series>, accessed August 2, 2024.
- “Cristo Rey University Partners,” Cristo Rey Miami High School, available at <https://www.cristoreymiami.org/admissions/cristo-rey-university-partners>, accessed August 5, 2024.
- “CSJ Programs,” Georgetown University, available at <https://csj.georgetown.edu/CSJprograms/>, accessed July 23, 2024.
- “Current Use and Endowed Gifts-What’s the Difference?,” Georgetown University, available at <https://giving.georgetown.edu/current-use-vs-endowment/>, accessed December 7, 2023.
- “Current Use Gifts and Endowments,” Harvard School of Engineering and Applied Sciences, available at <https://seas.harvard.edu/office-finance/accounting/current-use-gifts-and-endowments>, accessed September 15, 2023.
- “Dahlgren Chapel of The Sacred Heart,” Georgetown University, available at <https://campusministry.georgetown.edu/dahlgren/>, accessed July 26, 2024.
- “Dahlgren Undergoes Restoration,” Georgetown University, January 26, 2012, available at <https://www.georgetown.edu/news/dahlgren-undergoes-restoration/>, accessed July 26, 2024.
- “Dartmouth College Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.
- “Davidson College and Duke University Partner with KIPP Schools to Promote College Completion,” Davidson College, June 27, 2012, available at <https://www.davidson.edu/news/2012/06/27/davidson-college-and-duke-university-partner-kipp-schools-promote-college-completion>, accessed March 4, 2024.
- “Department of Theology - Major,” University of Notre Dame, available at <https://theology.nd.edu/major-minors/major/>, accessed August 3, 2024.
- “Discover unique opportunities at the University of Notre Dame,” NDCentral, available at <https://nd.campuslabs.com/engage/>, accessed July 6, 2024.
- “Does a Good Football Team Make a Good College?,” Liberal Arts Colleges, available at <https://www.liberalartscolleges.com/does-a-good-football-team-make-a-good-college/>, accessed July 24, 2024.
- “Does Columbia Offer Merit Scholarships?,” Columbia College, available at <https://www.cc-seas.columbia.edu/content/does-columbia-offer-merit-scholarships>, accessed July 28, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

“Download the Data,” U.S. Department of Education College Scorecard, available at <https://collegescorecard.ed.gov/data/>, accessed July 25, 2024.

“Dreaming Out Loud,” Vanderbilt University, October 31, 2008, available at <https://news.vanderbilt.edu/2008/10/31/dreaming-out-loud/>, accessed July 22, 2024.

“Duke University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Eligibility Criteria for Members,” Coalition for College, available at <https://www.coalitionforcollegeaccess.org/eligibility-criteria>, accessed February 23, 2024.

“Emergency Funds,” Cornell University Office of Financial Aid and Student Employment, available at <https://finaid.cornell.edu/special-circumstances/emergency-funds>, accessed August 5, 2024.

“Emory Expands Financial Aid to Allow More Students to Graduate Debt-Free,” Emory University, January 31, 2022, available at https://news.emory.edu/stories/2022/01/upress_emory_advantage_expansion_31-01-2022/story.html?utm_source=together.emory.edu&utm_medium=referral&utm_campaign=Advancement, accessed July 22, 2024.

“Emory University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Endowment,” Harvard University, available at <https://www.harvard.edu/about/endowment>, accessed September 22, 2023.

“Endowment Fundamentals,” NACUBO, May 14, 2021, available at <https://learn.nacubo.org/products/endowment-fundamentals>, accessed August 4, 2024.

“Endowment Payout Process,” Stanford University, May 1, 2023, available at <https://fingate.stanford.edu/managing-funds/endowment-payout-process>, accessed September 22, 2023.

“Endowment Report 2023,” Brown University, 2023, available at https://investment.brown.edu/sites/default/files/INV_Endowment%20Report%20FY23_MP-3689_Final.pdf, accessed August 5, 2024.

“Endowments,” National Council of Nonprofits, available at <https://www.councilofnonprofits.org/running-nonprofit/fundraising-and-resource-development/endowments>, accessed September 22, 2023.

“Engagement,” Cornell University, available at <https://www.cornell.edu/engagement/>, accessed July 6, 2024.

“Evaluation Criteria,” University of Notre Dame, available at <https://admissions.nd.edu/apply/evaluation-criteria/>, accessed July 6, 2024.

“Exemption Requirements - 501(c)(3) Organizations,” IRS, available at <https://www.irs.gov/charities-non-profits/charitable-organizations/exemption-requirements-501c3-organizations>, accessed July 26, 2024.

“Facts and Figures,” University of Pennsylvania, available at <https://srfs.upenn.edu/financial-aid/undergraduate-aid-program/facts-and-figures>, accessed July 25, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- “Fall 2022 Classical Studies,” University of Pennsylvania, 2022, available at <https://courses.upenn.edu/>, accessed August 3, 2024.
- “Federal Pell Grant Program,” U.S. Department of Education, available at <https://www2.ed.gov/programs/fpg/index.html>, accessed July 23, 2024.
- “Fighting Irish Scholars,” University of Notre Dame, available at <https://studentenrichment.nd.edu/programming/fighting-irish-scholars/>, accessed July 7, 2024.
- “Financial Aid,” University of Pennsylvania Admissions, available at <https://admissions.upenn.edu/affording-penn/financial-aid>, accessed July 23, 2024.
- “Financial Aid Appeals,” Cornell University, available at <https://finaid.cornell.edu/special-circumstances/financial-aid-appeals>, accessed July 7, 2024.
- “Financial Aid Budget Forecast to Grow 5 Percent as UChicago Implements New Aid Initiatives,” University of Chicago News, April 2, 2015, available at <https://news.uchicago.edu/story/financial-aid-budget-forecast-grow-5-percent-uchicago-implements-new-aid-initiatives>, accessed July 25, 2024.
- “Financial Aid Forms,” Boston College, available at <https://www.bc.edu/bc-web/offices/student-services/financial-aid/financial-aid-forms.html>, accessed August 22, 2023.
- “Financial Statements and Notes to Financial Statements,” Smithsonian Institution, January 26, 2022, accessed July 7, 2024.
- “First Gen & Low Income Program,” Massachusetts Institute of Technology, available at <https://firstyear.mit.edu/first-generation-program/>, accessed July 7, 2024.
- “First Generation & Low-Income Student Support,” Cornell University, available at <https://scl.cornell.edu/FGLI>, accessed July 8, 2024.
- “First Year Advisors,” University of Notre Dame, available at <https://advising.nd.edu/first-year-and-incoming-students/first-year-advisors/>, accessed July 7, 2024.
- “For-Profit vs. Nonprofit Colleges: What’s the difference and why does it matter?,” BigFuture, available at <https://bigfuture.collegeboard.org/plan-for-college/find-your-fit/types-of-colleges/types-of-colleges/for-profit-vs-non-profit>, accessed August 6, 2024.
- “Frequently Asked Questions,” Columbia College, available at <https://cc-seas.financialaid.columbia.edu/enhancements/faq>, accessed July 22, 2024.
- “From Game Day Thrills to Championship Victories: 10 Best Colleges for Sports Fans,” USA Today 10Best, September 1, 2023, available at <https://10best.usatoday.com/awards/travel/best-college-for-sports-fans-2023/>, accessed July 24, 2024.
- “Funding Types,” University of Notre Dame, available at <https://admissions.nd.edu/aid-affordability/funding-types/>, accessed July 26, 2024.
- “General FAQs,” Dartmouth College, available at <https://financialaid.dartmouth.edu/faqs/general-faqs>, accessed July 22, 2024.
- “Georgetown Scholars Program History,” Georgetown University, available at <https://gsp.georgetown.edu/about/gsp-program-history/>, accessed July 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- “Georgetown Scholars Program Model,” Georgetown University, available at <https://gsp.georgetown.edu/how-it-works/model/>, accessed July 7, 2024.
- “Georgetown Scholars Program Nears \$20M Goal to Permanently Fund Emergency Aid for First-Gen and Low-Income Students,” Georgetown University, July 1, 2022, available at <https://feed.georgetown.edu/access-affordability/georgetown-scholars-program-nears-20m-goal-to-permanently-fund-emergency-aid-for-first-gen-and-low-income-students/>, accessed July 7, 2024.
- “Georgetown Undergraduate Scholarships,” Georgetown University, available at <https://finaid.georgetown.edu/financial-resources/undergrad-scholarships/>, accessed April 23, 2024.
- “Georgetown University Athletics Endowments,” Georgetown University Giving, available at <https://giving.georgetown.edu/what-to-support/schools-programs/athletics/give-to-athletics/endowments/>, accessed June 27, 2024.
- “Georgetown University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.
- “Georgetown University Common Data Set,” Common Data Set Initiative, 2023-2024, available at <https://georgetown.app.box.com/s/i6ct2x531j7aso2ka3kvw2blur82embn>, accessed August 4, 2024.
- “Georgetown University Common Data Set,” Common Data Set Initiative, 2015-2016, available at <https://georgetown.app.box.com/s/8vtoy67rj039e2tw6fk9knax92rhkpm3>, accessed August 1, 2024.
- “Georgetown University Tuition and Costs,” BigFuture available at <https://bigfuture.collegeboard.org/colleges/georgetown-university/tuition-and-costs>, accessed July 5, 2024.
- “Giving to U.S. College and Universities at \$58 Billion in Fiscal Year 2023,” CASE, February 21, 2024, available at <https://www.case.org/resources/giving-us-college-and-universities-58-billion-fiscal-year-2023>, accessed July 25, 2024.
- “Grants and Scholarships,” Emory University - Office of Financial Aid, available at <https://studentaid.emory.edu/undergraduate/types/grants-scholarships/index.html>, accessed August 5, 2024.
- “Grants and Scholarships,” Cornell University, available at <https://finaid.cornell.edu/types-of-aid/grants-and-scholarships>, accessed July 10, 2024.
- “Grutter v. Bollinger: Brief of the American Educational Research Association, the Association of American Colleges and Universities, and the American Association for Higher Education as Amici Curiae in Support of Respondents,” Supreme Court Insight, 2003, available at <https://blackfreedom.proquest.com/wp-content/uploads/2020/09/grutter69.pdf>, accessed August 4, 2024.
- “Harvard’s Endowment,” Harvard University, available at <https://finance.harvard.edu/endowment>, accessed December 11, 2023.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- “HEPI Design and Use,” Commonfund, available at <https://info.commonfund.org/hubfs/Institute/HEPI/HEPI%20Design%20and%20Use.pdf>, accessed July 7, 2024.
- “High School Preparation,” University of Pennsylvania Admissions, available at <https://admissions.upenn.edu/how-to-apply/what-penn-looks-for/high-school-preparation>, accessed May 1, 2024.
- “History of the Netter Center,” Netter Center for Community Partnerships at the University of Pennsylvania, available at <https://www.nettercenter.upenn.edu/about-center/history-netter-center>, accessed July 25, 2024.
- “Home,” Center for Measuring University Performance, available at <https://mupcenter.org/>, accessed July 28, 2024.
- “How Aid Works,” Harvard College, available at <https://college.harvard.edu/financial-aid/how-aid-works>, accessed July 25, 2024.
- “How America Pays for College: Sallie Mae’s National Study of College Students and Parents,” Sallie Mae, 2023, available at <https://www.salliemae.com/content/dam/slm/writtencontent/Research/HowAmericaPaysforCollege2023.pdf>, accessed July 24, 2024.
- “How the Federal Government Distributes Aid to Students,” Lumina Foundation & IHEP, available at <https://www.luminafoundation.org/files/resources/form-and-formula-viewing-guide.pdf>, accessed December 7, 2023.
- “How to Appeal Financial Aid Award Packages,” finaid, available at <https://finaid.org/financial-aid-applications/financial-aid-appeal/>, accessed July 24, 2024.
- “Hurricane Ike 2008,” Rice University, available at <https://www.hcfcd.org/About/Harris-Countys-Flooding-History/Hurricane-Ike-2008>, accessed July 18, 2024.
- “Images in Flux: The 20th Century Development of the Undergraduate Experience at Penn,” University of Pennsylvania, 1999, available at <https://archives.upenn.edu/exhibits/penn-history/images-in-flux/part-8/>, accessed July 7, 2024.
- “Impact: Investment Office - Northwestern University,” Northwestern University, available at <https://www.northwestern.edu/investment/impact/>, accessed August 4, 2024.
- “Increase of 10.4 Percent in Financial Aid Will Benefit a Wide Range of MIT Families,” Massachusetts Institute of Technology News, March 4, 2016, available at <https://news.mit.edu/2016/increase-financial-aid-benefit-students-families-0304>, accessed August 7, 2024.
- “Information on Admissions Lawsuits,” University of Michigan, September 5, 2012, available at https://diversity.umich.edu/admissions/legal/gra_amicus-ussc/um.html, accessed July 28, 2024.
- “Institution Characteristics Cornell University 2022-23,” National Center for Education Statistics, available at <https://nces.ed.gov/ipeds/institution-profile/190415>, accessed July 26, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- “Institution Characteristics Georgetown University 2022-23,” National Center for Education Statistics, available at <https://nces.ed.gov/ipeds/institution-profile/131496>, accessed July 26, 2024.
- “Institution Characteristics University of Notre Dame 2022-23,” National Center for Education Statistics, available at <https://nces.ed.gov/ipeds/institution-profile/152080>, accessed July 26, 2024.
- “Institution Characteristics University of Pennsylvania 2022-23,” National Center for Education Statistics, available at <https://nces.ed.gov/ipeds/institution-profile/215062>, accessed July 26, 2024.
- “Institutional Methodology: Get the Full Picture,” CollegeBoard, 2014, available at <https://secure-media.collegeboard.org/digitalServices/pdf/professionals/institutional-methodology.pdf>, accessed August 29, 2023.
- “IPEDS Institution Data Profile - Georgetown University,” National Center for Education Statistics, 2023, available at <https://nces.ed.gov/collegenavigator/?q=georgetown&s=all&id=131496>, accessed July 28, 2024.
- “IPEDS Institution Data Profile - Massachusetts Institute of Technology,” National Center for Education Statistics, 2023, available at <https://nces.ed.gov/ipeds/institution-profile/166683>, accessed July 7, 2024.
- “Johns Hopkins University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.
- “Journalism,” Northeastern University College of Arts, Media and Design, available at <https://camd.northeastern.edu/journalism/>, accessed July 28, 2024.
- “Key Factors in Asset Allocation Decisions for Endowments,” Commonfund, December 1, 2023, available at <https://www.commonfund.org/blog/key-factors-in-asset-allocation-decisions-for-endowments>, accessed July 7, 2024.
- “KIPP College Partnerships,” KIPP, available at <https://www.kipp.org/approach/kipp-forward/college-partnerships/>, accessed March 4, 2024.
- “KROC Institute for International Peace Studies,” University of Notre Dame, available at <https://kroc.nd.edu/undergraduate/>, accessed August 3, 2024.
- “Lady Mowlson Bequeaths the First Undergraduate Scholarship,” The Harvard Crimson, available at <https://financialaid.hcf.harvard.edu/lady-mowlson>, accessed November 30, 2023.
- “Land-Grant Mission,” Cornell University College of Agriculture and Life Sciences, available at <https://cals.cornell.edu/land-grant>, accessed August 3, 2024.
- “Leading the Way in Artificial Intelligence Research,” Cornell University, available at <https://ai.cornell.edu/>, accessed July 6, 2024.
- “Living Options,” University of Pennsylvania, available at <https://residential-services.business-services.upenn.edu/living-options>, accessed July 6, 2024.
- “Local Economic Snapshot,” Cornell University, June 30, 2023, available at <https://economicimpact.cornell.edu/local/>, accessed July 19, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- “Macalester Today Spring 2005,” Macalester College, April 1, 2005, available at <https://digitalcommons.macalester.edu/macalestertoday/82/>, accessed August 4, 2024.
- “Majors,” University of Pennsylvania, available at <https://catalog.upenn.edu/undergraduate/arts-sciences/majors/>, accessed July 6, 2024.
- “Margaret Courtenay Stone Memorial Book Endowment Fund,” Georgetown University Library, available at <https://library.georgetown.edu/giving/endowments/stone>, accessed July 7, 2024.
- “Massachusetts Institute of Technology Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.
- “Massachusetts Institute of Technology Common Dataset,” Common Dataset Initiative, 2022-2023, available at <https://ir.mit.edu/projects/2022-23-common-data-set/>, accessed July 25, 2024.
- “Massachusetts Supplemental Nutrition Assistance Program (SNAP),” SNAP, available at <https://www.benefits.gov/benefit/1280>, accessed July 8, 2024.
- “Match with Colleges and Scholarships,” BigFuture, available at <https://bigfuture.collegeboard.org/student-search-service>, accessed July 7, 2024.
- “Mayo Clinic 2022 Fact Sheet,” Mayo Clinic, 2022, available at <https://newsnetwork.mayoclinic.org/n7-mcnn/7bcc9724adf7b803/uploads/2023/04/2022-Mayo-Clinic-Fact-Sheet-.pdf>, accessed July 28, 2024.
- “Medical Departments and Centers,” Mayo Clinic, available at <https://www.mayoclinic.org/departments-centers>, accessed July 28, 2024.
- “Member Schools,” Coalition for College, available at <https://www.coalitionforcollegeaccess.org/our-members>, accessed February 12, 2024.
- “Members of the Board of Regents,” Smithsonian, available at <https://www.si.edu/regents/members>, accessed August 1, 2024.
- “Merit Scholarship Opportunities,” Vanderbilt University, available at <https://www.vanderbilt.edu/scholarships/faq.php>, accessed June 27, 2024.
- “Merit Scholarships,” Johns Hopkins University, available at <https://apply.jhu.edu/tuition-aid/types-of-financial-aid/merit-scholarships/>, accessed July 6, 2024.
- “Merit Scholarships,” Duke University, available at <https://ousf.duke.edu/merit-scholarships/>, accessed July 6, 2024.
- “Merit Scholarships,” University of Chicago, available at <https://collegeadmissions.uchicago.edu/financial-support/scholarships/merit-scholarships>, accessed July 6, 2024.
- “Merit Scholarships,” Rice University, available at <https://financialaid.rice.edu/types-aid/merit-scholarships>, accessed July 6, 2024.
- “Michael Bloomberg Makes Largest Ever Contribution to Any Education Institution in the United States,” Bloomberg Philanthropies, November 18, 2018, available at <https://www.bloomberg.org/press/michael-bloomberg-makes-largest-ever-contribution-education-institution-united-states/>, accessed August 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

"Mission," University of Notre Dame, available at <https://www.nd.edu/about/mission/>, accessed July 6, 2024.

"Mission + History," Cristo Rey Network, available at <https://www.cristoreynetwork.org/about/mission-history>, accessed August 4, 2024.

"Mission Statement," Massachusetts Institute of Technology, available at <https://www.mit.edu/about/mission-statement/>, accessed July 6, 2024.

"MIT Facts 2021," Massachusetts Institute of Technology, 2021, available at <https://facts.mit.edu/wp-content/uploads/2022/03/MIT-Facts-2021-Accessible-with-Cover.pdf>, accessed July 6, 2024.

"MIT Need-Based Aid Dates Back to 1867," MIT News, 1992, available at <https://news.mit.edu/1992/aid-0506>, accessed April 29, 2024.

"MIT OpenCourseWare," Massachusetts Institute of Technology, available at <https://ocw.mit.edu/about/>, accessed July 23, 2024.

"The MIT Press Receives \$10 Million Endowment Gift for Open Access to Knowledge," Massachusetts Institute of Technology, May 8, 2023, available at <https://mitpress.mit.edu/the-mit-press-receives-10-million-endowment-gift-for-open-access-to-knowledge/>, accessed July 23, 2024.

"MIT Reshapes Itself to Shape the Future," MIT News, October 15, 2018, available at <https://news.mit.edu/2018/mit-reshapes-itself-stephen-schwarzman-college-of-computing-1015>, accessed July 7, 2024.

"MIT Scholarships," Massachusetts Institute of Technology, available at <https://sfs.mit.edu/undergraduate-students/types-of-aid/mit-scholarship/>, accessed July 24, 2024.

"MIT Undergraduate Research Opportunities Program," Massachusetts Institute of Technology, available at <https://urop.mit.edu/>, accessed July 6, 2024.

"MIT welcomes nine MLK Visiting Professors and Scholars for 2023," Massachusetts Institute of Technology, available at <https://news.mit.edu/2023/mit-welcomes-mlk-visiting-professors-scholars-0927>, accessed July 6, 2024.

"Museum Hours and Locations: Visiting our Museums, Galleries, and Zoo," Smithsonian, available at <https://www.si.edu/visit/hours>, accessed August 1, 2024.

"National College Match," QuestBridge, available at <https://www.questbridge.org/high-school-students/national-college-match#scholarship>, accessed August 4, 2024.

"Need-Blind Admissions and the Drive to Increase Endowed Scholarships," University of Pennsylvania Almanac, 1999, available at <https://almanac.upenn.edu/archive/v46/n11/fin-aid.html>, accessed April 29, 2024.

"Need Analysis," National Association of Independent Colleges and Universities, available at <https://www.naicu.edu/policy-advocacy/issue-brief-index/student-aid/needanalysis>, accessed December 7, 2023.

"Northwestern University Common Data Set," Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

"Notre Dame Scholars' Program," University of Notre Dame, available at <https://scholars.nd.edu/>, accessed August 3, 2024.

"Notre Dame Scholars' Program All Awards (A-Z)," University of Notre Dame Office of the Provost, available at <https://scholars.nd.edu/awards/list-of-awards/>, accessed August 2, 2024.

"NSSE Survey Instruments," National Survey of Student Engagement, available at <https://nsse.indiana.edu/nsse/survey-instruments/index.html>, accessed July 28, 2024.

"Official Cohort Default Rates for Schools," Federal Student Aid, November 20, 2023, available at <https://fsapartners.ed.gov/knowledge-center/topics/default-management/official-cohort-default-rates-schools>, accessed July 7, 2024.

"Operating Structure," U.S. Department of Education, available at <https://www2.ed.gov/about/offices/or/index.html>, accessed July 25, 2024.

"Organizations," NDCentral, available at <https://nd.campuslabs.com/engage/organizations>, accessed July 6, 2024.

"Other Grants and Scholarships," Brown University, available at <https://finaid.brown.edu/aid-types/grants-scholarships>, accessed July 28, 2024.

"Patricia Gercik Fund," MISTI - MIT Global Experiences, available at <https://misti.mit.edu/memory-patricia-gercik>, accessed August 4, 2024.

"Penn Expands Financial Aid Program to Eliminate Loans: Fact Sheet," University of Pennsylvania, December 17, 2007, available at <https://penntoday.upenn.edu/news/penn-expands-financial-aid-program-eliminate-loans-fact-sheet>, accessed July 22, 2024.

"Penn Knowledge is Power Program (PennKIPP)," University of Pennsylvania Vice Provost for Student Engagement, available at <https://vpse.upenn.edu/pennkipp/>, accessed August 3, 2024.

"Penn's Focus on Tomorrow," University of Pennsylvania, available at <https://in-principle-and-practice.upenn.edu/>, accessed July 6, 2024.

"Premedical Curriculum," Columbia College and Columbia Engineering Berick Center for Student Advising, available at https://www.cc-seas.columbia.edu/preprofessional/health/premedical_curriculum, accessed July 10, 2024.

"Preparing for MIT," Massachusetts Institute of Technology, available at <https://mitadmissions.org/apply/prepare/be-yourself/>, accessed July 6, 2024.

"Professional Judgment," National Association of Financial Aid Administrators, April 2021, available at https://www.nasfaa.org/uploads/documents/NASFAA_AE_2021-22_PJ_SSG_192CD.pdf, accessed August 4, 2024.

"Prudent Management of Institutional Funds Act: Map," Uniform Law Commission, available at <https://www.uniformlaws.org/committees/community-home?communitykey=043b9067-bc2c-46b7-8436-07c9054064a3>, accessed September 22, 2023.

"Public NCSE Tables," NACUBO, June 10, 2024, available at <https://www.nacubo.org/Research/2023/Public-NCSE-Tables>, accessed July 28, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- “Purpose and Vision - Smithsonian,” Smithsonian, available at <https://www.si.edu/about/mission>, accessed July 7, 2024.
- “Ranking of U.S. Social Work/Welfare Programs,” Social Psychology Network, available at <https://www.socialpsychology.org/gsocwork.htm>, accessed July 28, 2024.
- “Rankings,” Washington Monthly, 2009, available at https://web.archive.org/web/20090905062010/http://www.washingtonmonthly.com/college_guide/rankings/national_university_rank.php, accessed July 26, 2024.
- “Rare and Manuscript Collections,” Cornell University, available at <https://rare.library.cornell.edu/>, accessed July 6, 2024.
- “Research Departments and Divisions,” Mayo Clinic, available at <https://www.mayo.edu/research/departments-divisions>, accessed June 5, 2024.
- “Residential Life - Current Students,” University of Notre Dame, available at <https://residentiallife.nd.edu/undergraduate/apply-for-housing/apply-for-fall-semester-housing/current-students/>, accessed August 3, 2024.
- “Residential Life - Residence Halls,” University of Notre Dame, available at <https://residentiallife.nd.edu/undergraduate/residence-halls/>, accessed August 3, 2024.
- “Rice Strengthening Its Commitment to Loan-Free Financial Aid,” Rice University, December 16, 2021, available at <https://news.rice.edu/news/2021/rice-strengthening-its-commitment-loan-free-financial-aid>, accessed July 22, 2024.
- “Rice University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.
- “Rural, Suburban, Urban Campus Settings,” BigFuture, available at <https://bigfuture.collegeboard.org/plan-for-college/find-your-fit/types-of-colleges/campus-setting-rural-suburban-urban>, accessed July 28, 2024.
- “Search Classes 2024,” University of Pennsylvania, 2024, available at <https://courses.upenn.edu/>, accessed August 2, 2024.
- “Smithsonian Duties and Responsibilities of the Regents,” Smithsonian Institution, April 12, 2010, available at https://www.si.edu/content/governance/pdf/Duties_and_Responsibilities_of_the_Regents_4-12-10.pdf, accessed July 7, 2024.
- “Smithsonian Fiscal Year 2023 Federal Budget Totals More Than \$1 Billion,” Smithsonian Institution, January 9, 2023, accessed July 7, 2024, available at <https://www.si.edu/newsdesk/releases/smithsonian-fiscal-year-2023-federal-budget-totals-more-1-billion>.
- “Smithsonian Organizational Chart,” Smithsonian Institution, 2024, available at <https://www.si.edu/sites/default/files/Admin/smithsonian-organizational-chart.pdf>, accessed July 7, 2024.
- “SNAP Eligibility,” USDA Food and Nutrition Service, available at <https://www.fns.usda.gov/snap/recipient/eligibility>, accessed August 5, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- “Solving the World’s Toughest Medical Problems,” Mayo Clinic, available at <https://www.mayoclinic.org/about-mayo-clinic>, accessed June 5, 2024.
- “Student & Campus Life - Swipe Out Hunger,” Cornell University, available at <https://scl.cornell.edu/belonging-support-services/centers-student-equity-empowerment-and-belonging/first-generation-low-income-student-support/swipe-out-hunger>, accessed July 7, 2024.
- “Student & Campus Life Access Fund,” Cornell University, available at <https://scl.cornell.edu/belonging-support-services/centers-student-equity-empowerment-and-belonging/first-generation-low-income-student-support/access-fund>, accessed July 7, 2024.
- “Student Search Service: What Information Is Shared,” BigFuture, available at <https://bigfuture.collegeboard.org/student-search-service/what-information-shared>, accessed July 7, 2024.
- “Study of Endowments,” NACUBO-TIAA, 2020, available at <https://www.nacubo.org/Research/2022/Public-NTSE-Tables>, accessed September 22, 2023.
- “Summer College Immersion Program,” Georgetown University, available at <https://summer.georgetown.edu/summer-college-immersion>, accessed July 7, 2024.
- “Tenure,” American Association of University Professors, available at <https://www.aaup.org/issues/tenure>, accessed August 4, 2024.
- “Types of Financial Aid: Loans, Grants, and Work-Study Programs,” Federal Student Aid, available at <https://studentaid.gov/understand-aid/types>, accessed August 20, 2023.
- “Under Secretary for Finance and Administration | Chief Financial Officer,” Smithsonian Institution, available at <https://www.si.edu/about/ousa>, accessed July 7, 2024.
- “Undergraduate Program,” Georgetown University Department of Theology and Religious Studies, available at <https://theology.georgetown.edu/undergraduate/>, accessed July 6, 2024.
- “Undergraduate Tuition & Aid,” MITFacts, available at <https://facts.mit.edu/undergraduate-admissions/undergraduate-tuition/>, accessed July 25, 2024.
- “Understanding College and University Endowments,” American Council on Education, 2021, available at <https://www.acenet.edu/Documents/Understanding-College-and-University-Endowments.pdf>, accessed September 22, 2023.
- “Understanding the Endowment,” Brown University, available at <https://investment.brown.edu/endowment/understanding-endowment>, accessed May 7, 2024.
- “Uniform Prudent Management of Institutional Funds Act,” National Conference of Commissioners on Uniform State Laws, November 8, 2007, available at <https://www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=d88fe964-fa49-9b1e-e197-2389fcc49990&forceDialog=0>, accessed September 22, 2023.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

"University Mission," Cornell University available at <https://www.cornell.edu/about/mission.cfm>, accessed July 8, 2024.

"University Mission Statement," Georgetown University, available at <https://governance.georgetown.edu/mission-statement/>, accessed July 6, 2024.

"University of Chicago Common Data Set," Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

"University of Notre Dame Common Data Set," Common Dataset Initiative, 2023-2024, available at <https://iris.nd.edu/institutional-research/common-data-set-cds/common-data-set/>.

"University of Notre Dame Common Data Set," Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

"University of Notre Dame Programs/Majors," National Center for Education Statistics, available at <https://nces.ed.gov/collegenavigator/?id=152080>, accessed August 7, 2024.

"University of Pennsylvania Common Data Set," Common Data Set Initiative, 2015-2016, available at <https://upenn.app.box.com/s/mivuljjf57btij3f6af2ghgox2vrojqi>, accessed August 1, 2024.

"University of Pennsylvania Common Data Set," Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

"University of Pennsylvania Common Data Set," Common Data Set Initiative, 2023-2024, available at <https://upenn.app.box.com/s/a1qh9mtwmjbmju373eva98zxeefl4vmu>, accessed August 1, 2024.

"University of Pennsylvania Consolidated Financial Statements," PricewaterhouseCoopers, September 22, 2022, available at <https://www.finance.upenn.edu/wp-content/uploads/Penn-Division-of-Finance-FY22-Annual-Report.pdf>, accessed August 1, 2024.

"University of Pennsylvania Programs/Majors," National Center for Education Statistics, available at <https://nces.ed.gov/collegenavigator/?id=215062>, accessed August 7, 2024.

"University of Phoenix-Arizona," NCES, available at <https://nces.ed.gov/collegenavigator/?id=484613>, accessed July 25, 2024.

"Vanderbilt College Access and Affordability," Vanderbilt University, available at <https://www.vanderbilt.edu/federal-relations/vanderbilt-college-access/>, accessed July 7, 2024.

"Vanderbilt University Common Data Set," Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

"What Are the Different Types of Financial Aid?," BigFuture, available at <https://bigfuture.collegeboard.org/pay-for-college/get-help-paying-for-college/different-types-financial-aid>, accessed August 2, 2024.

"What is Professional Judgment?," Federal Student Aid, available at <https://studentaid.gov/help-center/answers/article/what-is-professional-judgment>, accessed July 7, 2024.

"What is Student/Professor Interaction Like? Are there Research Opportunities for Undergraduates?," University of Pennsylvania Alumni, available at

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- https://www.alumni.upenn.edu/s/1587/gid2/16/interior_1col.aspx?sid=1587&gid=2&calcid=15713&calpgid=2861&pgid=252&ecid=15715&crd=0&cid=15713, accessed August 5, 2024.
- “What is the 568 Presidents Group?,” 568 Presidents Group, January 25, 2022, available at <https://web.archive.org/web/20220125094142/http://www.568group.org/home/>, accessed August 1, 2024.
- “What Is the FAFSA?,” CollegeBoard, June 12, 2023, available at <https://blog.collegeboard.org/what-is-the-fafsa>, accessed August 21, 2023.
- “What is the KIPP Network,” KIPP Public Schools Network, available at <https://www.kipp.org/about/network/>, accessed August 1, 2024.
- “What We Look For,” California Institute of Technology, available at <https://www.admissions.caltech.edu/apply/what-we-look-for>, accessed July 25, 2024.
- “What Will I Pay?,” University of Notre Dame, 2024, available at <https://admissions.nd.edu/aid-affordability/estimate-your-cost/>, accessed July 24, 2024.
- “Who Profits? Students’ Experiences at For-Profit Colleges,” Public Agenda, January 1, 2023, available at <https://publicagenda.org/resource/who-profits-students-experiences-at-for-profit-colleges/>, accessed July 7, 2024.
- “Who Provides the Match Scholarship and Financial Aid?,” QuestBridge, available at <https://questbridge.zendesk.com/hc/en-us/articles/218778817-Who-provides-the-Match-Scholarships-and-financial-aid>, accessed December 7, 2023.
- “Yale University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.
- Associates, Georgetown University Library, “Newsletter 12,” October 1980, available at <https://repository.library.georgetown.edu/bitstream/handle/10822/551066/LibraryAssociatesNewsletter12.pdf>, accessed July 7, 2024.
- Bacow, Lawrence S., et al., “Harvard University Financial Report for Fiscal Year 2022,” PricewaterhouseCoopers, October 12, 2022, available at <https://finance.harvard.edu/annual-report>, accessed December 11, 2023.
- Baum, Sandy, “Exploring Ways to Enhance FAFSA Efficiency: The Federal Methodology: Is It a Good Measure of Ability to Contribute Toward Educational Expenses?,” Urban Institute and The National Association of Student Financial Aid Administrators, August 2020, available at https://www.nasfaa.org/uploads/documents/FAFSA_Series_Pt10_Federal_Methodology.pdf, accessed August 21, 2023.
- Baum, Sandy, “A Primer on Economics for Financial Aid Professionals,” CollegeBoard, 2004, available at <https://professionals.collegeboard.org/pdf/primer-economics-financial-aid-professionals.pdf>, accessed September 14, 2023.
- Berman, Julien, “Unhedge University Funds,” The Harvard Crimson, April 11, 2023, available at <https://www.thecrimson.com/column/toward-a-higher-higher-education/article/2023/4/11/berman-harvard-endowment-spending/>, accessed June 5, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Boyington, Amy and Brenna Swanston, "Does March Madness Performance Drive College Application Rates?," Forbes, February 28, 2024, available at <https://www.forbes.com/advisor/education/online-colleges/does-march-madness-performance-drive-college-application-rates/>, accessed July 9, 2024.
- Cairns, Hilary, "The Difference Between a School's Sticker Price and Net Price – And How to Estimate It," CollegeRaptor, December 21, 2022, available at <https://www.collegeraptor.com/find-colleges/articles/affordability-college-cost/the-difference-between-a-schools-sticker-price-and-net-price-and-how-to-estimate-it>, accessed August 20, 2023.
- Chuang, Louis and Hannah Kim, "Cornell Food Pantry Replaces Bread-N-Butter Pantry, Boasts Longer Hours, More Space," The Cornell Daily Sun, October 29, 2019, available at <https://cornellsun.com/2019/10/29/cornell-food-pantry-replaces-bread-n-butter-pantry-boasts-longer-hours-more-space>, accessed July 7, 2024.
- Clark, Brian, "Brown to Eliminate Packaged Loans from University Undergraduate Aid Awards in 2018-19," Brown University, December 7, 2017, available at https://news.brown.edu/articles/2017/12/promise?utm_campaign, accessed July 25, 2024.
- Clodfelter, Kirsten, "I Picked My School Based on Its Sports Teams. Here's How I Actually Liked It," College Covered, available at <https://www.collegecovered.com/plan/pick-college-on-sports/>, accessed July 24, 2024.
- Cubbage, Alan, "Northwestern Boosts Financial Aid for Students," Northwestern University, March 3, 2016, available at <https://news.northwestern.edu/stories/2016/03/northwestern-boosts-financial-aid-for-students/>, accessed July 22, 2024.
- Dean, James, "Access Fund Eased Pandemic's Burden on Students," Cornell University, May 7, 2020, available at <https://departments.as.cornell.edu/news/access-fund-eased-pandemics-burden-students>, accessed July 7, 2024.
- Delouya, Samantha, "The Rise of Gig Workers is Changing the Face of the US Economy," CNN Business, July 25, 2023, available at <https://www.cnn.com/2023/07/24/economy/gig-workers-economy-impact-explained/index.html>, accessed July 25, 2024.
- Dortch, Cassandra, "Federal Pell Grant Program of the Higher Education Act: Primer," Congressional Research Service, 2021, available at <https://files.eric.ed.gov/fulltext/ED617516.pdf>, accessed May 1, 2024.
- Dunn, Mark, "Yale Enhances Undergraduate Aid Packages for Fourth Time in Six Years," Yale News, October 28, 2021, available at <https://news.yale.edu/2021/10/28/yale-enhances-undergraduate-aid-packages-fourth-time-six-years>, accessed July 25, 2024.
- Ezarik, Melissa, "Students Approach Admissions Strategically and Practically," Inside Higher Ed, March 20, 2022, available at <https://www.insidehighered.com/admissions/article/2022/03/21/survey-student-college-choices-both-practical-and-strategic>, accessed August 14, 2023.
- Folan, Tim, "Student-Athlete Experience Endowments," University of Pennsylvania, 2024, available at <https://giving.upenn.edu/priorities/financial-aid-and-student-experiences/support-for-student-athletes/>, accessed July 7, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- Greene, Randy L., "Endowment Management," College and University Business Administration, 2016, available at <https://nacubo.inmagic.com/Presto>, accessed August 5, 2024.
- Griesbach, Rebecca, "Nick Saban's lasting impact on Alabama's campus, students: 'That pride shows'," AL.com, February 2, 2024, available at <https://www.al.com/educationlab/2024/02/nick-sabans-lasting-impact-on-alabamas-campus-students-that-pride-shows.html>, accessed July 8, 2024.
- Guido, Michael, et al., "Commonfund on the Road: Insights from our Seattle Roundtable," Commonfund, July 10, 2023, available at <https://www.commonfund.org/blog/commonfund-on-the-road-insights-from-our-seattle-roundtable>, accessed August 4, 2024.
- Heller, Don, et al., "Unequal Distribution," National Association for College Admission Counseling, October 10, 2023, available at <https://admitted.nacacnet.org/wordpress/index.php/2023/10/10/unequal-distribution/>, accessed July 8, 2024.
- Johnson, Craig, "Northwestern 2022 Financial Report," KPMG, December 16, 2022, available at <https://www.northwestern.edu/financial-operations/annual-financial-reports/>, accessed September 22, 2023.
- Kelley, Susan, "Cornell Launches \$5B Campaign 'To Do the Greatest Good'," Cornell Chronicle, October 22, 2021, available at <https://news.cornell.edu/stories/2021/10/cornell-launches-5b-campaign-do-greatest-good>, accessed August 4, 2024.
- Kirshtein, Rita J. and Steven Hurlburt, "Revenues: Where Does the Money Come From?," American Institute for Research, 2012.
- Kutz, Gregory, "For-Profit Colleges," United States Government Accountability Office, 2010, available at <https://www.gao.gov/assets/gao-10-948t.pdf>, accessed July 7, 2024.
- Leonhardt, David, "What Makes a College 'Selective' — and Why It Matters," The New York Times, April 4, 2013, available at <https://archive.nytimes.com/economix.blogs.nytimes.com/2013/04/04/what-makes-a-college-selective-and-why-it-matters/>, accessed July 28, 2024.
- Long, Cynthia, "Child Nutrition Programs: Income Eligibility Guidelines," USDA Food and Nutrition Service, February 20, 2024, available at <https://www.federalregister.gov/documents/2024/02/20/2024-03355/child-nutrition-programs-income-eligibility-guidelines>, accessed August 1, 2024.
- Mayes, Brittany and Emily Giambalvo, "Does Sports Glory Create a Spike in College Applications? It's Not a Slam Dunk.," The Washington Post, December 6, 2018, available at <https://www.washingtonpost.com/graphics/2018/sports/ncaa-applicants/>, accessed July 28, 2024.
- McCann, Michael, "The Flutie Effect: How UMBC Can Benefit from a Historic NCAA Tournament Upset," Sports Illustrated, March 17, 2018, available at <https://www.si.com/college/2018/03/17/umbc-virginia-upset-doug-flutie-jairus-lyles>, accessed July 28, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

- McCool, Deanna, "Endowment Paves Way for Collaboration Between ACMS and Athletics," University of Notre Dame, June 22, 2017, available at <https://science.nd.edu/news-and-media/news/endowment-paves-way-for-collaboration-between-acms-and-athletics/>, accessed July 25, 2024.
- Rigol, Gretchen W., "Admissions Decision-Making Models: How U.S. Institutions of Higher Education Select Undergraduate Students," College Board, 2003, available at <https://files.eric.ed.gov/fulltext/ED562589.pdf>, accessed August 4, 2024.
- Robinson, Ashley, "All 115 Need-Blind Colleges in the US: A Complete Guide," PrepScholar, 2020, available at <https://blog.prepscholar.com/need-blind-colleges-list>, accessed July 7, 2024.
- Rooney, Shannon "Meet the Class of 2021: Notre Dame Welcomes its Next Class of High-Achieving, Service-focused Students," University of Notre Dame, August 22, 2017, available at <https://admissions.nd.edu/visit-engage/stories-news/meet-the-class-of-2021-notre-dame-welcomes-its-next-class-of-high-achieving-service-focused-students/>, accessed July 6, 2024.
- Roth, Michael, "Sustainable Affordability," Wesleyan University, May 30, 2012, available at <https://roth.blogs.wesleyan.edu/2012/05/30/sustainable-affordability/>, accessed August 4, 2024.
- Satterfield, Rachel L., "Duke University Financial Statements 2021/2022," KPMG, October 4, 2022, available at <https://finance.duke.edu/resources/docs>, accessed December 11, 2023.
- Schweizer, Valerie and Karen Benjamin Guzzo, "Distributions of Age at First Births, 1960-2018," Bowling Green State University and National Center for Family & Marriage Research, 2020, available at <https://www.bgsu.edu/ncfmr/resources/data/family-profiles/schweizer-guzzo-distribution-age-first-birth-fp-20-11.html>, accessed July 25, 2024.
- Shaffer, Suzanne, "Need-Blind Colleges & Need-Blind Admissions," appily, available at <https://www.appily.com/guidance/articles/finding-your-college/need-blind-admission-colleges>, accessed August 4, 2024.
- Shor, Glen, "Massachusetts Institute of Technology Report of the Treasurer for the Year Ended June 30, 2022," PricewaterhouseCoopers, October 7, 2022, available at <https://vpf.mit.edu/sites/default/files/downloads/TreasurersReport/MITTreasurersReport2022.pdf>, accessed August 1, 2024.
- Smith, Jonathan, et al., "The Impact of College Outreach on High Schoolers' College Choices: Results from Over One Thousand Natural Experiments," The College Board, November 2020, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3463241, accessed July 7, 2024.
- Snyder, Thomas D., et al., "Digest of Education Statistics 2018," National Center for Education Statistics, December 2019, available at <https://nces.ed.gov/pubs2020/2020009.pdf>, accessed August 4, 2024.
- Zeiser, Kristina, et al., "Comparing Student Outcomes Between Student Support Services Participants and Nonparticipants in the 2004/09 Beginning Postsecondary Students Longitudinal Study," U.S. Department of Education Office of Postsecondary Education, 2019, available at

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

<https://www2.ed.gov/about/offices/list/ope/trio/sssparticipantsinbpsls.pdf>, accessed
August 4, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

APPENDIX C
LIST OF SOURCES

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

Common Data Set

“Brown University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“California Institute of Technology Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“University of Chicago Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Columbia College Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Columbia General Studies Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Cornell University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Dartmouth College Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Duke University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Emory University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Georgetown University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Johns Hopkins University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Massachusetts Institute of Technology Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Northwestern University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“University of Notre Dame Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“University of Pennsylvania Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Rice University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Vanderbilt University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

“Yale University Common Data Set,” Common Data Set Initiative, 2021-2022, accessed August 1, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

No-Loan Timeline

- “Dreaming Out Loud,” Vanderbilt University, October 31, 2008, available at <https://news.vanderbilt.edu/2008/10/31/dreaming-out-loud/>, accessed July 22, 2024.
- “Michael Bloomberg Makes Largest Ever Contribution to Any Education Institution in the United States,” Bloomberg Philanthropies, November 18, 2018, available at <https://www.bloomberg.org/press/michael-bloomberg-makes-largest-ever-contribution-education-institution-united-states/>, accessed August 7, 2024.
- “Emory Expands Financial Aid to Allow More Students to Graduate Debt-Free,” Emory University, January 31, 2022, available at https://news.emory.edu/stories/2022/01/upress_emory_advantage_expansion_31-01-2022/story.html?utm_source=together.emory.edu&utm_medium=referral&utm_campaign=Advancement, accessed July 22, 2024.
- “Financial Aid Budget Forecast to Grow 5 Percent as UChicago Implements New Aid Initiatives,” University of Chicago News, April 2, 2015, available at <https://news.uchicago.edu/story/financial-aid-budget-forecast-grow-5-percent-uchicago-implements-new-aid-initiatives>, accessed July 25, 2024.
- “Frequently Asked Questions,” Columbia College, available at <https://cc-seas.financialaid.columbia.edu/enhancements/faq>, accessed July 22, 2024.
- “General FAQs,” Dartmouth College, available at <https://financialaid.dartmouth.edu/faqs/general-faqs>, accessed July 22, 2024.
- “Penn Expands Financial Aid Program to Eliminate Loans: Fact Sheet,” University of Pennsylvania, December 17, 2007, available at <https://penntoday.upenn.edu/news/penn-expands-financial-aid-program-eliminate-loans-fact-sheet>, accessed July 22, 2024.
- “Rice Strengthening Its Commitment to Loan-Free Financial Aid,” Rice University, December 16, 2021, available at <https://news.rice.edu/news/2021/rice-strengthening-its-commitment-loan-free-financial-aid>, accessed July 22, 2024.
- MITLIT-00659580 (“Timeline of Select MIT Financial Aid Policy Changes,” Massachusetts Institute of Technology).
- Clark, Brian, “Brown to Eliminate Packaged Loans from University Undergraduate Aid Awards in 2018-19,” Brown University, December 7, 2017, available at https://news.brown.edu/articles/2017/12/promise?utm_campaign=, accessed July 25, 2024.
- Cubbage, Alan, “Northwestern Boosts Financial Aid for Students,” Northwestern University, March 3, 2016, available at <https://news.northwestern.edu/stories/2016/03/northwestern-boosts-financial-aid-for-students/>, accessed July 22, 2024.
- Dunn, Mark, “Yale Enhances Undergraduate Aid Packages for Fourth Time in Six Years,” Yale News, October 28, 2021, available at <https://news.yale.edu/2021/10/28/yale-enhances-undergraduate-aid-packages-fourth-time-six-years>, accessed July 25, 2024.

ATTORNEYS' EYES ONLY - SUBJECT TO SECOND AMENDED CONFIDENTIALITY ORDER (DKT. 608)

COFHE

BROWN_0000331819 ("COFHE Yellowbook for 2014-2015," Consortium on Financing Higher Education 2014-2015).

BROWN_0000334010 ("COFHE Yellowbook for 2019-2020," Consortium on Financing Higher Education, 2019-2020).

CORNELL_LIT0000183508 ("COFHE Yellowbook for 2015-2016," Consortium on Financing Higher Education, 2015-2016).

GTWNU_0000195239 ("COFHE Yellowbook for 2016-2017," Consortium on Financing Higher Education, 2016-2017).

JHULIT_0000122562 ("COFHE Yellowbook for 2023-2024," Consortium on Financing Higher Education, 2023-2024).

MITLIT-000152520 ("COFHE Yellowbook for 2018-2019," Consortium on Financing Higher Education, 2018-2019).

MITLIT-000152521 ("COFHE Yellowbook for 2017-2018," Consortium on Financing Higher Education, 2017-2018).

MITLIT-000241697 ("COFHE Yellowbook for 2011-2012 Questionnaire," Consortium on Financing Higher Education, June 3, 2011).

RICE_LIT0000027138 ("COFHE Yellowbook for 2010-2011," Consortium on Financing Higher Education, 2010-2011).

RICE_LIT0000027141 ("COFHE Yellowbook for 2013-2014," Consortium on Financing Higher Education, 2013-2014).

NCES Faculty Tenure

National Center for Education Statistics, "Institution Characteristics Cornell University 2022-23," available at <https://nces.ed.gov/ipeds/institution-profile/190415>, accessed July 26, 2024.

National Center for Education Statistics, "Institution Characteristics Georgetown University 2022-23," available at <https://nces.ed.gov/ipeds/institution-profile/131496>, accessed July 26, 2024.

National Center for Education Statistics, "IPEDS Institution Data Profile - Massachusetts Institute of Technology," 2023, available at <https://nces.ed.gov/ipeds/institution-profile/166683>, accessed July 7, 2024.

National Center for Education Statistics, "Institution Characteristics University of Notre Dame 2022-23," available at <https://nces.ed.gov/ipeds/institution-profile/152080>, accessed July 26, 2024.

National Center for Education Statistics, "Institution Characteristics University of Pennsylvania 2022-23," available at <https://nces.ed.gov/ipeds/institution-profile/215062>, accessed July 26, 2024.